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HOMER AND THE
MONUMENTS

HOMER AND THE MONUMENTS

BY

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PREFACE

THE primary object of this book is to review the archaeological record of the Late Bronze and Early Iron Ages in the Aegaeon area, to give as full an account as possible of those elements in it which find a place in the Homeric poems, and to relate this survey to that other record, shadowy, fragmentary, often enigmatic, which is preserved in the poems themselves. The year 1873 may be taken as the date at which archaeological investigation began to concern itself with Homer, for though the first sod was turned on the hill of Hissarlik in 1870, it was not till 1873, when the first 'Homeric' results were obtained by the discovery of 'Priam's' palace and treasure and of the 'Skaian' Gates, that the equation of Troy = Bunarbashi was seriously threatened, and that scholars realized that they would have to take account of Schliemann and his spade.

Sixty years have passed since Helbig's pioneer work, *Das homerische Epos aus den Denkmälern erläutert*, appeared in its second and much enlarged edition, and since that date there has been no comprehensive review of the ever accumulating material. By 1886 Troy, Mycenae, Tiryns, and Orchomenos had yielded their first-fruits to the excavator, but Crete was still untouched and 'Mycenaean' civilization lacked even an approximate chronology. Until that could be provided, all that the Homeric archaeologist could do to carry on Helbig's researches was to examine and comment on separate subjects. This was done in several cases—those, e.g. of the house and of weapons and armour—and some valuable results were obtained, but there could be no attempt to correlate them. An admirable summary of the actual situation is given by M. P. Nilsson in the third chapter of his book, *Homer and Mycenae*, 1933.

As the excavation of Knossos progressively revealed the lineaments of Minoan culture, its exotic character and the remoteness of its past, the complexity of the problem of Mycenaean civilization became increasingly apparent. On the Homeric side of the question the raising of the date of the Shaft-graves to the sixteenth century ruled out their contents as part of the material background of the Trojan War; no one of them had ever housed the bones of Agamemnon, and Schliemann's famous telegram to George, King of the Hellenes, reporting the discovery at Mycenae of his predecessor, King of all the Hellenes, was expunged from the record. The exploration of Crete led naturally to the investigation, without Homeric prepossessions, of prehistoric Greece as a whole. Orchomenos and the Peloponnesian sites had already given glimpses of a past remoter even than the date of the Shaft-graves; the excavation of sites in Boeotia (Chacronea), Phocis, and Thessaly provided the basis of a synthesis not achieved till after the end of the war of 1914-18, when Korakou, Zygouries, and Eutresis combined to fill in the picture. Similarly, the scientific

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account of the excavations of Schliemann and Dörpfeld at Troy, published in 1902 under the title *Troja und Ilion*, paved the way for those further excavations by American archaeologists whose summary reports have already thrown a new illumination on the site and whose final results are eagerly awaited.

Within this same period the Early Iron Age began to receive specialized attention. As early as 1887 Assarlik (near Halikarnassos) had yielded the first view of a culture destined to be known later as proto-Geometric and Greek; by 1914 Vrokastro and other Cretan sites had provided evidence of the same or at least of an exceedingly closely related culture situated nearer to Greece. Proto-Geometric ware has since been found on various mainland and island sites; the bulk of the evidence, however, comes from the German excavation of the Kerameikos cemetery at Athens and is in great part available in *Kerameikos I*, the first volume of the publication still in progress. In this a full account of the topography and pottery is given, with a more summary treatment of other finds. Volume iv, which appeared in 1943, contains an account of objects of the eleventh and tenth centuries and presumably completes the tale of proto-Geometric; it is not available in this country and I have not met anyone who has seen it.¹ The salient features of the Late Geometric age with which the Early Iron Age terminates had become known, so far at least as Attica is concerned, before the end of the nineteenth century through the exploration of the Dipylon cemetery. The earlier period remains in many respects obscure; the full publication of the Kerameikos results should do much to illuminate it and to provide at least a relative chronology.

The extension of his field of vision since Schliemann laid down the spade has displayed the problems of the Homeric archaeologist in new aspects. He is no longer concerned solely to decide how far Homer portrayed the material background of the Late Bronze Age of which he sings or that of his own day or something intermediate between the two, a question in part already answered, though much that is of interest and importance remains open to discussion. Bearing in mind the recent insistence of linguistic and literary critics, especially Meillet and the lamented Milman Parry, on the antiquity of the hexameter and the obscurity of its origin, and on the remarkably strong element of tradition in the language to which the constant use of formulae testifies, remembering also that combination in the Greek language of Indo-European structure with a strikingly large non-Indo-European element in the vocabulary from Homer onwards to which Kretschmer long ago called attention—with new vistas opening on every side, the Homeric archaeologist must ask himself when and in what circumstances that racial mixture first took place which issued in (among other things) the Homeric hexameter and the earliest form of Greek we know.

¹ Since these words were written, the book has become available.

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The Homeric scholar must consider not only the earliest form of the *Wrath of Achilles*, but the origin of heroic poetry in Greece, which must far antedate that of the Tale of Troy; the Homeric archaeologist must ask himself whether it is not to be carried back far beyond the actual attack by which the city perished in the opening years of the twelfth century. In the concluding chapter I have tried to indicate the lines on which archaeological evidence may help to furnish the answer.

For the prosecution of future research in this field the first requisite is a fresh collection of the archaeological evidence, vastly increased since Helbig's day, which falls within the period extending from c. 1600 to c. 700, while some attention must be paid to centuries earlier still. That this book supplies the indispensable body of material so far as published and accessible is the justification for its existence, and the hope of the author is that Homeric scholars of the future will find in it a basis for their researches.

In any live study important lines of discovery and research will always be incomplete at whatever date a general survey is undertaken. In the present instance the position was greatly aggravated by the paralysis of war and the impenetrable barriers behind which it impartially segregated the maimed scholarly activities of all countries alike, belligerent and neutral, friend and foe. The lack of two works which will shortly be at the disposal of scholars I have special reason to deplore, viz. Professor Wace's book on Mycenae, soon to be produced by the Princeton Institute for Advanced Studies,¹ and the final 'Troy' to be given to the world by Professor Blegen and his band of helpers. The restraints and interruptions imposed by the war which greatly impeded the writing of this book also made it at first impossible and later on a slow and difficult business to obtain relevant works produced abroad. Nevertheless, important books did reach this country. Mr. Furumark's *The Mycenaean Pottery* and *The Chronology of Mycenaean Pottery* were secured by the library of the Ashmolean Museum in August 1945, having been available some months earlier in that of the Society for the Promotion of Hellenic Studies in London, and were followed by Professor Persson's *New Tombs at Dendra*. The author's kind permission to reproduce Plate I and Fig. 114 of his book has enabled me to exhibit to the Homeric scholar a recent discovery of exceptional interest. I am no less indebted to Professor Kurt Müller for the photographs of one of the terra-cotta votive shields from Tiryns reproduced in Plate IX of this book. My thanks are also due to the editor of the *American Journal of Semitic Languages and Literature* and the Department of Oriental Languages and Literatures of the University of Chicago for permission to reproduce from the *Journal* the figures which appear as Plate V and VI, 1 of this book and to Mr. P. Dikaios, Curator of the Cyprus Museum at Nicosia, for the illustrations of the dove cup which appear on p. 332. The chapter on the Homeric House was written in the war years

¹ This work appeared in the current year (1949).

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and though the plan of the house at Priene on p. 419 is of course ultimately derived from the German publication of the site (*Priene*, T. Wiegand and H. Schrader), it is actually reproduced from Fig. 124 of Professor D. S. Robertson's *Greek and Roman Architecture*. The practice which I have followed of giving where possible several references for illustrations of the same object was begun when the destruction of books in this country by enemy action was at its maximum; it was maintained for the convenience of such readers as have access only to libraries which do not contain the most recent publications. For example, vol. vii of Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*, contains a more comprehensive collection of Geometric figured vases than any single book published since. *Introduction à l'Iliade* by Professor Mazon and his coadjutors was brought to Oxford in 1945 by Professor Schaeffer as well as the first instalment of his own publication of Ras Shamra. Through the generous kindness of another French scholar, M. Bayet, the masterly *Grammaire homérique, Morphologie et Phonétique*, of Professor Chantraine came into my hands at a date when there was no other copy in this country and in time for me to profit by it when writing part of my last chapter.

Before acknowledging my obligations to the living I wish to record the deep debt which in common with all Homeric archaeologists I owe to a great figure, forgotten to-day in some quarters and in others the object of an ill-informed contempt. To Wilhelm Dörpfeld, the coadjutor of Schliemann in his later years and long associated with the German Archaeological Institute in Athens, scholars owe not only that basic elucidation of the sites of Tiryns and Troy which ensured their further fruitful exploration, but the establishment of rigidly scientific standards in the business of excavation, an innovation which has preserved for us untold treasures all over the Aegæan area. That in later years he became the exponent of many wild theories is true but irrelevant and does not diminish our debt. In his own realm his work, as those testify who have had access to the daily records of his digs, was as nearly impeccable as anything human can be, and in the sections which he contributed to Schliemann's *Tiryns* and in *Troja und Ilion* (to name 'Homeric' sites only) a phantom of the great excavator survives. The immortality of such a one must be for the general scholar much like that of the departed actor or preacher for the public—a name and not much else. By the nature of his task he must necessarily as it progresses destroy much, sometimes all, of the evidence on which his conclusions are to be based, and when he has ceased to expound them on the spot, the site remains indeed a record of supreme value, but has become a dead thing. Only those who have heard Dörpfeld lecture standing on the scenes of his greatest achievements can fully appreciate his quality; of that diminishing band the present writer has the good fortune to be one.

To many living scholars I am deeply indebted; and firstly to Sir John

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Myres, who encouraged me to pursue the study begun in Greece and who has always been ready to put at my disposal his vast stores of learning and experience and to exercise a criticism both stimulating and kind. To specialists in spheres beyond my range I owe much. Professor Battiscombe Gunn was good enough to read the chapter on Egypt, Dr. Saul Weinberg that on Prehistoric Greece to the end of the Middle Bronze Age; both helped me with information and criticism, as did Professor G. R. Driver when appealed to on matters connected with Assyria and the Phoenicians. It is hardly necessary to say that if errors appear in these chapters, I am solely responsible for them. Professor Beazley and Dr. Jacobsthal read the chapter on dress and gave me much help, both in discussion and by calling my attention to material in the later part of the story which I should otherwise have missed. For the conclusions on this subject, not all of them orthodox, I again am alone responsible. Professor Wade-Gery read the first and last chapters; his encouragement and his stimulating criticism have been equally useful and valued.

To my friend and former pupil Miss Joan Pickstone I owe a deep debt of gratitude for her co-operation in the compilation of the indexes; the heaviest part of the work was done by her.

Finally, my warmest gratitude is due to the Principal and Fellows of Somerville College who by electing me Lady Carlisle Research Fellow made possible the fulfilment of a long-cherished design.

H. L. LORIMER

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ABBREVIATIONS

I. CHRONOLOGICAL

EC.	Early Cycladic.	LH.	Late Helladic.
MC.	Middle Cycladic.	EM.	Early Minoan.
LC.	Late Cycladic.	MM.	Middle Minoan.
EH.	Early Helladic.	LM.	Late Minoan.
MH.	Middle Helladic.		

II. GENERAL

- AA.* *Archäologischer Anzeiger.*
Aegina. *Aegina, das Heiligtum der Aphaia,*
A. Furtwängler.
AJA. *American Journal of Archaeology.*
AM. *Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung.*
Annuario. *Annuario della Reale Scuola archeologica di Atene.*
Ant. Denh. *Antike Denkmäler.*
AO. *The Sanctuary of Artemis Orthia at Sparta,* ed. R. M. Dawkins.
Archiv für Rel. Wiss. *Archiv für Religionswissenschaft.*
Arg. Her. *The Argive Heraeum,* by Charles Waldstein and others.
BARV. J. D. Beazley, *Aetie Red-figure Vase-painters.*
BCH. *Bulletin de Correspondance hellénique.*
Bechtel, *Gr. Dial.* F. Bechtel, *Die griechischen Dialekte.*
Belcker, *Anec.* *Immanuelis Bekkeri Anecdota graeca.*
Bossert. H. Th. Bossert, *The Art of Ancient Crete.*
BM. Cat. *British Museum Catalogue, Br., of Bronzes, Jew., of Jewellery, Terr., of Terracottas, V., of Vases.*
B, BPI. *Bulletino di Paleontologia italiana.*
BPhW. *Berliner Philologische Wochenschrift.*
BSA. *Annual of the British School at Athens.*
— *Supp., Supplementary Paper.*
Bull. del Inst. *Bullettino del Instituto di Correspondenza archeologica.*
Bull. Met. Mus. *Bulletin of the Metropolitan Museum of Art.*
CAH. *Comitorum Atticorum Fragmenta,* ed. Kock.
CAH. *Cambridge Ancient History.*
Carchemish. Hogarth, D. G. and Woolley, C. I., *Carchemish.*
ChT. A. J. B. Wace, 'Chamber Tombs at Mycenae', *Archaeologia*, vol. lxxxii.
Comptes Rendus Acad. Insc. *Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres.*
CVA. *Corpus Vasorum Antiquorum.*
Délos. *Délos, Exploration archéologique de Délos faite par l'École française d'Athènes.*
Deltion. *Ἀρχαιολογικὸν Δελτικόν τοῦ Υποργείου τῶν Ὁρθονομημάτων καὶ Παιδείας.*
Dittenberger, *Syll. Sylloge Inscriptionum Graecarum*, ed. Guil. Dittenberger.
Dussaud, *Civ. préhell.* R. Dussaud, *Les Civilisations préhelléniques dans le bassin de la mer Égée.*
EDE. van Leeuwen, *Enchiridium Dictionis Epicae.*
Élite Céramogr. Lenormant et de Witte, *Élite des Monuments Céramographiques.*
Eph. Arch. *Ἐφημερίς Ἀρχαιολογική.*
Eutresis. Hetty Goldman, *Excavations at Eutresis in Boeotia.*
Exc. in Cyp. A. S. Murray, A. H. Smith, and H. B. Walters, *Excavations in Cyprus (Brit. Mus.).*
Exc. at Ephesus, also *Ephesus.* Hogarth, D. G., *Excavations at Ephesus (Brit. Mus.).*
FGH. *Fragmente der griechischen Historiker,* ed. F. Jacoby.

ABBREVIATIONS

- FGS. *see* Hampe.
 FHG. *Fragmenta Historicorum Graecorum*, ed. Müller.
 Fibules. Chr. Blinkenberg, *Les Fibules grecques et orientales*.
 W. M. Flinders Petrie, *Tools and Weapons*.
 Fries. G. Rodenwaldt, *Der Fries des Megarons von Mykenai*.
 Furtwängler, *Beschr.* Furtwängler, *Königliche Museen zu Berlin, Beschreibung der Vasensammlung im Antiquarium*.
 F. und L. A. Furtwängler und G. Loeschke, *Mykenische Vasen*.
 Gerhart, AV. E. Gerhart, *Auserlesene griechische Vasenbilder*.
 G. d. A., Meyer. Eduard Meyer, *Geschichte des Altertums*.
 Gr. Vm. Furtwängler und Reichhold, *Die griechische Vasenmalerei*.
 Hall, *see* Vrokastru.
 Hampe, Hampe, *Frühe griechische Sagenbilder*.
 HE. W. Helbig, *Das homerische Epos aus den Denkmälern erläutert*.
 Hist. Num., Head. B. V. Head, *Historia Numorum*.
 Hoffmann, Gr. D. O. Hoffmann, *Die griechischen Dialekte in ihrem historischen Zusammenhang*.
 HR. W. Helbig, *Ein homerischer Rundschild mit einem Biegel*.
 HW. W. Reichel, *Homerische Waffen*.
 IG. *Inscriptiones Graecae*.
 ILN. *Illustrated London News*.
 Imag. Inc. Graec. Ant. H. Roehl, *Imagines Inscriptionum Graecarum Antiquissimarum*.
 Inscr. de Delos, *see* Délos.
 JAI. *Journal of the Royal Anthropological Institute*.
 Jb. *Jahrbuch des Deutschen Archäologischen Instituts*.
 JEA. *Journal of Egyptian Archaeology*.
 JHS. *Journal of Hellenic Studies*.
 KBR. E. Kunze, *Kretische Bronzereliefs*.
 Ker. W. Kraiker und K. Kühler, *Keramikos, die Nekropolen des 12. bis 10. Jahrhunderts*.
 KtB. *Kunstgeschichte in Bildern*, ed. F. Winter.
 Kinkel, EGP. G. Kinkel, *Epicorum Graecorum Fragmenta*.
 LAA. *Liverpool Annals of Archaeology and Anthropology*.
 Met. mus. *Studies. Metropolitan Museum Studies*.
 Mitt. Vord. as. Ges. *Mitteilungen der vorderasiatischen Gesellschaft*.
 Mon. Ant. *Monumenti Antichi pubblicati per cura della R. Accademia dei Lincei*.
 Mon. del Inst., M. d. I. *Monumenti Inediti pubblicati dall' Instituto di Correspondenza Archeologica*.
 Mon. Piot. *Monuments et Mémoires publiés par l'Académie des Inscriptions et Belles-Lettres, Fondation Piot*.
 Mus. It. *Museo italiano di Antichità classica*.
 MuZ. E. Pfuhl, *Malerei und Zeichnung der Griechen*.
 Nauck, TGF. A. Nauck, *Tragicorum Graecorum Fragmenta*.
 NC. H. Payne, *Necrocorinthia*.
 Not. d. Sc. *Notizie degli Scavi dell' Antichità*.
 NT. A. W. Persson, *New Tombs at Dendra, near Midea*.
 Oest. Jahresh. *Jahreshefte des Oesterreichischen Archäologischen Instituts*.
 Ol. Olympia.
 OLZ. *Orientalische Literaturzeitung*.
 P. of M. Sir Arthur Evans, *The Palace of Minos*.
 PEFAQ. *Palestine Exploration Fund Quarterly*.
 PEQ. *Palestine Exploration Quarterly*.
 Pérachora. *Pérachora, the Sanctuaries of Hera Akroia and Limenia*, vol. 1, by Humphry Payne and others.
 PW. (also RE.) Pauly-Wissowa-Kroll, *Realencyclopädie der Altertumswissenschaft*.
 P. et C. Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*.
 PZ. *Prähistorische Zeitung*.
 QDAP. *Quarterly of the Department of Antiquities in Palestine*.

ABBREVIATIONS

- Rev. Arch.* *Revue Archéologique.*
RE., see *PW.*
RT. A. W. Persson, *The Royal Tombs at Dendra, near Midea.*
SCE. *The Swedish Cyprus Expedition.*
Schachgr. G. Karo, *Die Schachgräber von Mykenai.*
 Schliemann, M. and T. H. Schliemann, *Mycenae and Tiryns.*
SME. *The Swedish Messenia Expedition.*
Tkera. F. Hiller von Gärtringen, *Die Insel Thera.*
Vrohastra. *Excavations in Eastern Crete, Vrohastra.* E. H. Hall. University of Pennsylvania, the Museum Anthropological Publications, iii. 3.
VS. K. Friis Johansen, *Les Vases sicyonieus.*
 Ziehen, *Legg. Sac. von Prott und Ziehen, Leges Graecorum Sacrae e Titulis Collectae.*

CHAPTER I PREHISTORIC GREECE

AT a very early date a neolithic population was spread over the greater part, perhaps the whole, of Greece. It was agricultural in character, and its material civilization was of an extremely simple kind. Its pottery, exclusively hand-made, included burnished red, black, and grey ware and painted ware ultimately derived from the Painted Ware Culture of the Near East. Whence it entered Greece is uncertain; it extends over the mainland from Thessaly (where it appears as the First Thessalian Culture) in the north to Arcadia and Messenia (where it has been found at Malthi) in the south.¹

The date of the entrance of this neolithic culture into Greece cannot be even approximately fixed, but early in the third millennium it was followed by a fresh immigration, that of the population named by archaeologists the Early Helladic. The term Helladic, which is of course modern, is used to denote the Bronze Age culture of mainland Greece, the earliest phase of pre-Hellenic civilization sufficiently developed to concern the Homeric student. At some time within the Helladic period, which ends c. 1100 B.C. with the collapse of the Mycenaean civilization, the Greeks began to enter the peninsula, whose population by its close was at least in the main Greek-speaking and must have included representatives of every branch of the race. That the Dorians and north-western Greeks had entered the Peloponnese before the end of the twelfth century is certain; from that date onwards therefore Greece is, according to the formula of Thucydides, Hellenic.

It is certain that the Early Helladic people were not Greeks. There are very many place-names on the mainland which contain non-Greek roots and are not post-Greek. Of these names several classes are found, two with especial frequency, not only in Greece but in the islands of the Aegean and notably in Crete, and also in Anatolia, occurring with marked density in Caria and somewhat less thickly in Lykia, though their range is not confined to this south-west corner. They are names with the suffixes *-nth-* and *-ss-os* or *-a*; in Anatolia *-nth-* is replaced by *-nd-*. To take a few examples only, we find on the map of Caria: Alinda, Calynda, and Caryanda; Stephanns of Byzantium gives Purinthos as the name of a probably Graecized town. Lindos, on the other hand, testifies to an Anatolian or cognate element in Rhodes to which the cult of the pre-Hellenic Athana Lindia probably owes its origin. Xanthos is the name of a Lykian river as well as of the highly Graecized town that stands on it; Kretschmer² makes

¹ See C. Hawkes, *The Prehistoric Foundations of Europe*, p. 80, and for Malthi, Valmin, *The Swedish Messenia Expedition*, p. 399.

² *Glotta*, xxvii, p. 259.

a good case for regarding it as originating with a Greek-speaking settlement of the Bronze Age. In Crete Stephanus gives us the name of Surinthos; to Labyrinthos, which is not a place-name in the ordinary sense, corresponds Labranda or Labraunda in Caria, a village with an ancient shrine of Zeus Labrandeus,¹ whose image held the *παλᾶκος* or double axe. Plutarch² has a story to explain why, in the course of which he tells us that *λάβρος* is the Lydian word for double axe. Thus we are furnished with the true explanation of the Labyrinth of Knossos; it is indeed, as Evans revealed to us, the Place of the Double Axe, and the double axe appears to be the symbol of the young male deity of Crete whom the Greeks identified with Zeus. In classical times it is found on the coins of Tenedos and of certain cities of Caria. There is no reason to think that the word was specially Lydian, though Plutarch's source may have known of it as surviving in Lydia. It was probably diffused all over western Anatolia, and the name Labyrinthos makes it certain that it was once in use in Crete. For the mainland of Greece we have no evidence; but it may be noted that the double axe makes only rare and relatively late appearances there and seems to be imported from Crete.

As examples of the *-nth-* suffix on the mainland we have, to take a few examples only, Tiryns (whose first syllable is possibly found also in Thyatira) and Corinth; Saminthos on the edge of the Argive plain, the Arcadian mountain Erymanthos, the Attic deme Probalinthos; in the islands Mount Kunthos on Delos, Kerinthos, a town of Euboea mentioned in the *Catalogue of Ships*, the island of Lebinthos, and many other sites. To Knossos and Tylissos in Crete corresponds a number of obscure names in Caria as well as the more famous Mylas(s)a; in Lykia Telmessos and Termessos; on the mainland (Attica) Sphettos, Lykabettos, and Hymettos; Parnassos, to which corresponds a town Parnassos in the heart of Anatolia. Further, outside these two classes, non-Greek names appear as doubles, Skiritis is the name of a district in Laconia and of another in Caria, and Celenderis appears as the name of a town in Trozenia and another in Cilicia.³

The most complete list of these correspondences will be found in an article by Haley⁴ in which, in conjunction with Professor Blegen, he brings out the interesting fact that these names abound just where EH settlements are most frequent—in Phocis, Boeotia, Attica, Corinthia, and the Argolid. EH sites have recently been found in Elis⁵ and EH ware found its way to several outlying places such as Leucas; but it is on the east side of Greece south of Thessaly, to which the culture did not penetrate, that EH settle-

¹ Strabo 659.

² *Mor.* 301 F-302 A (Bernardakis, vol. ii, p. 346).

³ It is possible that we have here an Achaean settlement from the Peloponnese of the fourteenth century or later; v. *infra*, p. 35. Kephissos, however (mod. Ovajik), lies a little way to the East; the conjunction suggests that the point of departure was here.

⁴ *AJ.A.* xxxii (1928), pp. 141 ff.

⁵ *Ibid.* xlvii (1942), pp. 77 ff.

ments are massed. This is a clear indication that the EH population arrived by sea, from the east and south-east.¹

It appears certain that the place-names just discussed were given by the EH folk. They cannot be attributed to the neolithic population, for the names are found in the Cyclades and in Crete, to which this people did not penetrate. Nor can they be ascribed to the next wave of immigrants, the Middle Helladic people presently to be discussed, for they too never reached Crete.

The evidence suggests that for a time a common tongue was spoken, not necessarily of course as sole language, in Greece, Crete, and the other islands, and in a somewhat different form in the south-west region of Asia Minor; and that language was certainly not Greek. We find in Greek many nouns of the same forms as the place-names just discussed which cannot be traced in the other Indo-European languages and which are on the whole names likely to be taken over from the native population by a subsequent invader who settled in the land. They are for the most part the names of animals, especially birds, and of plants.² αἰγυθος and βρένθος are both unidentified birds (cf. κύμυδης, the name, Anatolian in form, of a bird which the gods call χαλκίς),³ σμύνθος, mouse, was variously said by the ancients to be Cretan (*Etyim. Mag.*) and Mysian (Polemon ap. Schol. A on *Il.* i. 39); probably the word, like λάβρος, was widely diffused. Apollo Smintheus, who controlled field-mice, had his seat at Chryse in the Troad according to the *Iliad*, and in historical times had several shrines in the Troad and one on the island of Tenedos. ἰάκυνθος, ἐρέβυνθος, τερέβυνθος, κυνάρισσος, νάρκισσος are all familiar. ἀσάμυνθος, which is found as a living word only in Homer, differs from the others in denoting an article which belongs to civilized, even sophisticated, life: it probably came into Greece from Crete in the Late Helladic age. θάλασσα was held by both Kretschmer and Meillet to belong to this pre-Greek language, but the grounds for this belief have been shown to be inadequate.⁴

That the EH folk were maritime in a high degree is plain from the disposition of their settlements, from their contacts with Crete, and from their trade with Troy, where EH pottery is imported from the final period of Troy I to the beginning of V;⁵ and this fact in turn accords with the hypothesis of their arrival by sea from so distant a point as the eastern region of the Mediterranean.

¹ See C. Schaeffer, *Ugaritica*, i, p. 9, where, speaking with special reference to Crete, the author says: 'En ce qui concerne le monde Égéen en particulier, il nous semble nécessaire pour comprendre la formation du Minoen ancien, de réduire sensiblement la part d'influence jusqu'ici accordée à l'Égypte prédynastique et protodynastique, et de tourner davantage les yeux vers l'Asie' (i.e. the Near East).

² See *Commentationes Aesopicae*, ix, J. Hübsch, *De Lingua antiquissimorum Graeciae Incolarum*, especially pp. 8, 18, and 26.

³ *S* 291.

⁴ C. D. Buck, *Classical Studies presented to Edward Capps*, pp. 42 ff.

⁵ *BSA*, xxxvii, p. 10.

It would, however, be rash to assume that the whole EH stock entered Greece from this remote region; such linguistic evidence as there is suggests that the points of departure for the Aegean area were much more widely distributed. Though the names and words just discussed are not Greek and do not figure in known Indo-European tongues, it does not follow that they are not Indo-European. The Boghazkeui records show that languages remote indeed from all known I.-E. languages, yet related to them, mainly by their inflectional system, established themselves in Asia Minor at a very early date. The earlier of the two languages in question—Luvian—is held by Forrer to have arrived as early as the fourth millennium, the second—Kanesian—not later than the second half of the third, having separated from the parent stock at least half a century earlier, a date which accords well enough with Aegean evidence. Further, the *-nth-*, *-nd-* suffix appears widely diffused in south and south-east Europe in the form *-nt-*, to some extent with Illyrian associations (Carnuntum) and also in Sicily (Akragas, Agrigentum) and south Italy (Taras, Tarentum, Male-, later Bene-ventum).¹ Lydian, the language of the Lemnian inscription, and Etruscan are all three closely interrelated and belong, like Kanesian, to that early (though post-Luvian) stage of I.-E. speech to which Kretschmer has given the name *Protindogermanisch*, reserving the term *Urindogermanisch* for the stage immediately preceding the separation of the parent stock into the Centum and Satem groups.² It is to this Tyrrheno-Pelasgian group, as Kretschmer calls it, after the *δίγλωσσοι βάρβαροι* of Thucydides,³ that he ascribes the *-nt-*, *-nth-*, and *-nd-* suffixes, assigning the *-ss-as* or *-a* to the older Luvian.

When we turn to the material side of the EH culture, the first point to note is the familiarity with metals which it displays. It stands at the head of the Bronze Age in Greece and presumably in Europe; in the Near East metals were in familiar use much earlier. It has recently been pointed out⁴ that bronze must for a very long time have been produced not by melting together metallic copper and metallic tin, but by smelting a mixture of the two ores. In an important note in *Antiquity*⁵ Mr. Wainwright shows that in all probability such a natural mixture was to be found in Syria, since the two rivers of Byblos, the Phaedrus and the Adonis, flow through regions which contain beds of both ores. It is further suggested that the Egyptian expression 'Asiatic copper' describes the bronze produced by smelting this natural mixture; the term first occurs early in the second half of the third millennium.

The quantities of bronze actually known to us from EH sites are necessarily small. It is rare to find metal objects in any quantity on

¹ See Kretschmer, 'Das *-nt-* Suffix', *Glotta*, xiv, pp. 84 ff.

² Kretschmer, 'Die protindogermanische Schücht', *ibid.*, pp. 300 ff.

³ iv, 102.

⁴ A. Lucas, *Ancient Egyptian Materials and Industries*, 3rd ed., pp. 250 ff.

⁵ xvii, p. 96; for a fuller statement see *JEA.* xx, pp. 29-32.

ancient sites except, under certain conditions, in tombs, and their contents depend on the burial customs prevalent and may, as in our own day, be very meagre or non-existent though the society which deposits, or fails to deposit them, is wealthy. Nor are known EH tombs as yet very numerous, though their number is increasing. For the most part collective burial was practised, in small pits and cist-graves, in rock-cut tombs and in caves. Besides a few small implements Zygouries (Cleonae) yielded a fine bronze dagger-blade¹ which has counterparts, probably of slightly earlier date, found in Early Cycladic contexts on the island of Syra and in Early Minoan graves in Crete. Silver is also known and is used principally for pins, and at least one startling example of gold-work is extant, viz. a gold 'sauce-boat',² from Heraia on the borders of Arcadia. Gold- and silver-smiths' work was also imported, as is shown by two deep bowls of gold and a vessel of silver resembling a phiale, all typically Anatolian and all reputed to have been found in Euboea.³ Nothing is known of the contexts in which they occurred, but they are linked with the metal-work of Alaca Hüyük and belong to this period. Of the native origin of the 'sauce-boat' there can be no doubt. One of the indications of a close connexion between the Early Cycladic and Early Helladic cultures is to be found in that highly individual form which is common to both. On the mainland and Crete, though not, so far as is known at present, in the Cyclades, a peculiar technique employed in baking produced a highly distinctive mottled ware.⁴ The fact that these and other characteristics are not found in Asia Minor suggests that in Crete, the other islands, and Greece the immigrants found and mixed with a native population which must be credited with a share in the development of the pottery. In the material remains regarded as a whole we have the reflection of an intelligent, progressive, highly skilled population, devoted to commerce,⁵ familiar with metals and able to work them, and producing pottery of high quality without the aid of the wheel. They were not apparently highly organized socially; only at Tiryns in the foundations of a round building of great size do we find anything that looks like a chief's house.

It is certain that a population so numerous, so widely diffused, and so gifted must have contributed an important strain to the composite Greek people, and there is much to support the attractive hypothesis of Fuchs that they are the progenitors of the Ionian stock.⁶

Throughout its earlier history the EH people had, so far as appears, no contacts with Europe farther north, and the same is true of Thessaly, so

¹ Blegen, *Zygouries*, pl. xx; cf. p. 185.

² *JHS*, xlv (1924), p. 163, fig. 2; Bossert³, fig. 147.

³ B. Segall, *Katalog der Goldschmiede-arbeiten, Museum Benaki*, pp. 11 ff., pls. i-iii, and Nachtrag, pp. 211-12, pls. lxxvii-ix.

⁴ See *Zygouries*, pl. ix.

⁵ See *ibid.*, p. 210.

⁶ *Die griechischen Fundgruppen der frühen Bronzezeit*, pp. 60-1 and 143-4.

long as the First Thessalian culture lasted. With the advent of the Second (c. 2600-2500) there came a change. In this (commonly known as the Dhimini culture) relations become apparent with that of the Painted Ware people as exemplified in the settlements of Erösd and Cucuteni (in Transylvania and Moldavia). The common elements are fortification walls, previously unknown in Greece, multiple at Dhimini but appearing in a simpler form at Erösd and Cucuteni, and a form of the megaron house, rectangular, with a single entrance to the main room and a more or less central hearth standing clear of the walls. Both these features, however, are found not merely in the contemporary Second City at Troy but in Troy I.¹ While relations between the two regions are reciprocal to some extent (since the painted ware of Dhimini is certainly derived from the Trans-Danubian region), on our present evidence it looks as if the balance of credit lay with the Aegaeon and more particularly with Troy and as if a northward thrust had originated somewhere in this region. On the other hand, in the decoration of the Dhimini pottery are reproduced all the leading characteristics of the *Bandkeramik* (ribbon-ware) style which extended from the Ukraine to the Rhine.² Here, then, is certainly penetration from the north. Though it did not extend to Crete, the *Bandkeramik* style exercised a notable influence there, introducing the spiral into the repertory of Cretan artists before the end of EM III and profoundly affecting the decoration of MM pottery. In the Cyclades, however, there was apparently actual infiltration of representatives of a peculiar form of the *Bandkeramik* culture which had already appeared in central Europe, markedly modified by contact with a culture of a very different type, that namely of the *Schnurkeramik* or Corded Ware folk, who are in part at least identical with the people of the Battle-axe culture commonly regarded as Indo-European. In this hybrid culture the decoration of the pottery from being ribbon-like and painted becomes string-like and incised or impressed; instead of spreading over the whole surface of the vase it is used to emphasize its division into structural elements.³ Contemporaneously a new type of amphora or hydria characteristic of pure *Schnurkeramik* appears in northern and central Greece (penetrating somewhat later to the Peloponnese) and, with a somewhat modified shape, in Troy II.⁴ The total number, however, is far too small to suggest any movement of population; the presence of the pottery in these regions must be due to trade relations alone.

At the same time battle-axes of central European type appear fairly copiously in Troy⁵ and abundantly in Macedonia and Thessaly. In the ensuing (i.e. the Middle Helladic) period axes occur at Eutresis in Boeotia

¹ *AJ.A.* xli (1937), p. 18; xlii (1938), p. 566.

² See C. Hawkes, *The Prehistoric Foundations of Europe*, p. 105; Fuchs, *op. cit.*, pp. 65 ff.

³ *Ibid.*, pp. 79 ff.

⁴ *Ibid.*, pp. 95 ff.

⁵ *Ibid.*, pp. 117 ff.; cf. Büttel, *Prähistorische Forschung in Kleinasien*, pp. 41 ff.

and make a few sporadic appearances, not precisely datable, farther south, in Attica,¹ at Mycenae,² and even in Cos.³ Here we certainly have actual representatives of the warlike race whose southward drive had probably set in motion certain of their neighbours, represented by the hybrid culture just described. South of the Isthmus the Battle-axe intruders were probably of little significance as an element in the population, but in northern and central Greece they give a distinctive note to the civilization. Fuchs points out that the region of their predominance coincides fairly closely with that of the Aeolic dialect. This does not mean that the newcomers were Greek-speakers, but does suggest that they formed a sufficiently coherent body to give their own stamp to the language when at last it made its way into the peninsula. It may well be that the destruction of Troy II, c. 2300, was accomplished by invaders of the same stock.

According to the opinion at present generally accepted, it was a new wave of invaders, the Middle Helladic people, who brought with them the Greek language.⁴ They extended their conquest over the whole of Greece, destroying the EH centres, sometimes founding settlements of their own on the same sites, as at Orchomenos, Eutresis, Korakou, and Zygouries, often leaving them desolate.⁵ Yet despite these signs of military conquest, and though their trail is marked here and there by a battle-axe, they do not produce the impression of a warrior folk. Scanty as is our knowledge of their weapons, it is safe to say that they lacked the sword, still foreign to the mainland; moreover, their conquest of Greece once achieved, they settle down quietly in their new abodes and show no desire to adventure themselves farther. It may well be that to relieve pressure of population elsewhere they were led to seek new territories by a dominant, military, and very possibly alien caste, representatives presumably of the Battle-axe folk. The break in culture which they produced, though not universal, was, where it occurred, extraordinarily thorough, testifying to a remarkable change in social custom and circumstances. Their wheel-made 'Grey Minyan' pottery with its predominantly metallic shapes offers a complete contrast to the hand-made EH ware (which is for the most part either glazed or decorated with painted patterns) and establishes the presence of an abundant supply of metal vessels to serve as models. Finally, the building for the first time of fortification walls round settlements⁶ suggests communities governed by chiefs able to lead them in battle. Much, however, remains to be explained, and especially the origin of the famous

¹ Fuchs, *op. cit.*, p. 119, fig. 13.

² *BSA.* xxv, p. 353, no. 83.

³ Fuchs, *op. cit.*, p. 121, pl. ix.

⁴ See C. Hawkes, *op. cit.*, pp. 239-40.

⁵ See Zygouries, p. 221, n. 1.

⁶ Valmin, e.g., at Malthi. *The Swedish Messenia Expedition*, p. 53. This is the only MH fortification wall at present known, but before its excavation the Germans had been able to infer the existence of one at Tiryns (*Tiryns*, iii, p. 11).

'Grey Minyan' ware. The recent excavation of some sites on which a MH stratum immediately overlies a neolithic with no intervening EH, coupled with the discovery of a neolithic ware stated to be indistinguishable from Grey Minyan, has suggested to the discoverers the solution that the neolithic was not superseded by the EH culture, but continued to exist contemporaneously with it. This must be true of the sites where neolithic immediately underlies MH, and may well be generally applicable; EH sites are apt to be situated near the coast or on natural thoroughfares, neolithic in places remote or not readily accessible from the sea. Korakou¹ and Zygouries, where the most careful search failed to reveal any neolithic traces, are good examples of the first; a specimen of the latter is furnished by Berbati, a site lying east of Mycenae, on the other side of Mount Euboea, in a small, fertile, and extremely secluded valley which has been described as 'almost a world to itself'.² Here Professor Persson found, first, a flourishing LH III settlement, below it much-ruined remains of MH occupation, including five graves, and, next and lowest, substantial neolithic remains.³ Obviously the neolithic culture lasted here till the installation of the MH, for only a few EH sherds were found, with no trace of EH occupation. The example is not of course sufficient by itself to prove the general contemporaneity of neolithic and EH; but as long as the EH folk did not covet more land or the neolithic sea-borne goods, there was no reason why the two communities should come into contact, much less conflict, in spite of their vicinity, and in such circumstances the more primitive culture might well survive in isolated areas.⁴ So far as can be seen, a new epoch opened for Berbati when the Mycenaean road system was developed in LH III and the place was brought into easy communication with the outside world. A road connected with that leading from Tiryns to Mycenae gave it at once the status of a princely seat, as the remains of a fine tholos tomb testify. Future excavation may supply a fuller answer to the question.⁵

Further, so far as the point immediately at issue is concerned, viz. the introduction of the Greek language into Greece, it is not greatly affected, even should it ultimately appear that the MH population of Greece was substantially the neolithic re-emerging into the light of day. So long as they were led by Greek-speakers, even in numbers relatively insignificant, the new language, for which it seems impossible to find a plausible later

¹ Near Corinth.

² See a descriptive article by A. J. B. Wace, *JLN*, 15 Feb. 1936, p. 276.

³ See *AA.*, 1935, p. 200; 1936, p. 138; and 1938, p. 552.

⁴ Cf. the neolithic village in the neighbourhood of Mileros in which Greek Geometric sherds were found.

⁵ At Malki in Messenia Valmin notes a considerable degree of continuity in the transition from the indigenous neolithic pottery to the MH; but as the neolithic ware is of a different sort (called by the excavator 'Astratic'), the site is not typical; moreover, Valmin is in no doubt about the violent destruction of the combined neolithic and EH settlement (*The Swedish Messenia Expedition*, p. 52).

date of entry, would have every chance of spread and survival. Numerical inferiority is no bar, as, to take one example only, the dominance of the intrusive I.-E. type of language in India shows. What the invading language must have is intrinsic superiority as a medium of communication; it must be clear and simple, so that it is at least relatively easy to understand and to learn.¹ If those to whom it is native are greatly inferior in numbers, they will probably require some form of social superiority—military, political, economic—which makes it advantageous or compulsory for the other party to learn it. Some such advantage certainly lay with the leaders of the MH movement, whether their forces came principally from within Greece or from outside. Leaders it must have had, for it was at least partly military, as the destruction of so many EH sites shows, and a military movement could not be organized by isolated neolithic hamlets. They were rich, as is shown by the access to metallic wealth indicated in the predominantly metallic forms of their pottery, and that they succeeded in establishing themselves in positions of local sovereignty is suggested not only by their fortified sites but by the much more centralized type of community which characterizes a number of MH sites as compared with their EH predecessors. Thebes, Orchomenos, Mycenae, Tiryns, and Amyklai are described by a German archaeologist as *Herrensitze*,² and these are just what a military conqueror would necessarily establish. Obviously the leaders must have had a certain following of their own race, or at least natives of the region, whatever it was, from which they took their departure for Greece. If we seek to determine it, probability and such evidence as we possess combine to indicate the northern shores of the Aegean. Here we have proof of the presence of an I.-E. element—the Battle-axe people—in considerable strength towards the end of the Early Bronze Age; they may have occupied Troy for a while and made a permanent contribution to her culture. The most recent authority on Macedonia has indicated 'proto-Minyan' features in the pottery of this area and regards the Minyan ware of central Greece as 'the result of a southward expansion of the Early Bronze Age population of Macedonia'.³ Such an ancestry would account for the completely new repertory of forms with which Grey Minyan starts its career, while still leaving to the indigenous neolithic technique the credit of producing the highly distinctive 'biscuit'. Again, the Battle-axe folk of the Macedonian region would have the opportunity of acquiring metal vessels, which as we have seen were in the EH period produced in Anatolia and exported thence; Troy II provides in the 'Great Treasure' of the Second City

¹ These are not necessarily the only characteristics of a 'master' language. Of the three languages, Greek, Latin, and English, which have at different periods been distributed over areas out of all proportion greater than that of the land of dispersion, each is the vehicle of a peculiarly rich and varied literature, a feature which is not likely to be accidental.

² Kraiker, 'Nordische Einwanderungen in Griechenland', *Die Antike*, xv (1939), pp. 207-8.

³ W. A. Bechtley, *Prehistoric Macedonia*, p. 123.

other examples of the craft. Further, if some of the earlier Battle-axe invaders had occupied the approaches, contingents from this quarter may have reinforced or even formed the main body of the immigrants into Greece.

Though some hundreds of MH graves in Greece are known, their contents tell us but little of the people. They are cist-graves, containing as a rule only a single occupant, a feature characteristic of the Battle-axe culture of northern and central Europe; single burial is, however, the rule in Early Cycladic graves, whose forms include a quadrangular though somewhat irregular cist. The skeleton is usually found in the contracted posture; sometimes it is extended at length. Almost nothing was buried with the dead, sometimes literally nothing capable of survival in the cist itself; for offerings outside the tomb there is a fair amount of evidence which suggests that 'tendance' of the dead was maintained after burial, perhaps permanently. The evidence comes from three graves at the Argive Heraion, where vases were found above the cists, and another at Drachmani in Phocis, which had adjacent to it a pit full of ashes and charred matter.¹

From the settlements of the MH people we get their house-plans. These, however, vary greatly, for the intruders seem sometimes to have adopted the indigenous architecture and sometimes to have combined features copied from it with their own. Sometimes we find a rather elaborate house with several rooms all of which are rectangular, sometimes one room has an apsidal termination to it, a feature borrowed from EH architecture in which it is characteristic though not universal.²

Eutresis, however, has given us a piece of evidence of unique value in that it enables us to determine the distinctively MH type of house, viz. the earliest example of the typical megaron known on the mainland.³ The MH megaron house is the direct ancestor of the great megaron palaces of Mycenae and Tiryns (though these include accretions from other sources), and these again have many characteristics which illustrate the accounts of palaces given in the Homeric poems. The essential features of the megaron house are as follows. It has a single entrance placed in one of the end walls; if there is a second room (which is generally, though not in the earlier examples invariably, the larger of the two), it can be entered only from the first, i.e. the house is of the but and ben type. In the fully developed examples the entrances of both rooms lie in the main axis of the building. There is a free-standing hearth which ends by becoming central; in the earlier examples this is not always the case, but it always stands clear of the walls, whereas in EH architecture it seems always to have been set against one or other of them. As we have seen, there is a site outside Greece where this type of house is found at an earlier date, viz. Troy I,

¹ Wace and Blegen, *Symbols of Olusset*, ix (1930).

² Blegen, *Korakou*, p. 77, fig. 110.

³ Goldman, *Eutresis*, p. 37.

while in Troy II, which was destroyed c. 2300, it is found in its complete and perfect form.¹ Previously there was an unsatisfactory gap in its history because the examples of Troy II, the only parallels known for the fourteenth-century megara of Mycenae and Tiryns, were so remote in time and space. There is still a gap, for the MH régime can hardly have established itself in Greece before the disappearance of Troy V, up to which date the importation of EH ware continues, whereas in the earliest phase of Troy VI typical Minyan ware, apparently imported from Greece, appears and, together with the local imitations to which it gave rise, constitutes the principal fabric of the place.² Here again we have circumstances which favour the hypothesis of a point of departure for the MH leaders, if not in the Troad itself, then in the regions immediately north of the Aegaeon, which would certainly experience those Trojan influences which made themselves felt as far north as Cucuteni and Erösd.

Yet another material object links the MH people, about whom we know so little, not only to the better documented succeeding culture, but to the Homeric poems, viz. the boar's tusk helmet. On two MH sites³ a series of slivers of boar's tusk has been found, cut and perforated for attachment to some kind of backing and, if we may trust the evidence of the Shaft-graves, designed to form an outer plating for helmets. We should not know what they were if we did not possess representations of helmets of this type beginning in the sixteenth century and extending well down into the fourteenth. Throughout this period the helmet was current, for slices of tusk have been found in a long series of LH tombs, beginning with the Shaft-graves.

The MH people became at least to a certain extent maritime; in fact, since they made no settlements in Thessaly, it is to be presumed that they reached their new seats south of it by sea. Contact was established with the Cyclades, and as a consequence a matt-painted ware closely resembling the contemporary variety of Middle Cycladic pottery developed alongside of Grey Minyan. This latter was exported to a site on Melos, Phylakopi, where it is found abundantly in strata also containing MM II ware from Crete, and can in consequence be dated within limits which, though much less definable than we could wish, are not, prehistorically speaking, extremely wide.⁴ The Minyan ware found in the initial stages of Troy VI

¹ *AJA*, xli (1937), p. 18; *Troja und Ilion*, p. 81, fig. 83.

² *B.S.A.* xxxvii, p. 10.

³ Entresis, Goldman, *Entresis*, p. 220, fig. 290; Eleusis, Mylenas, *μυλωνική Έλευσις*, pp. 55 and 145, fig. 119.

⁴ MM II ware occurred at Lahun in XIIth-dynasty contexts and a vase was found in a XIIth-dynasty tomb at Abydos, which gives a synchronism not, indeed, for the first appearance of MH ware in Greece, but for its prevalence there. Unfortunately the XIIth dynasty, which itself lasted for two centuries, cannot be dated within less than a similar period; according to the dating of Evans, hitherto accepted by most British archaeologists, the MM II period, coinciding with the maximum expansion of MH ware, lasted from c. 1900-c. 1700; cf. *P. of M.* i, p. 270, and *Cat. V.B.M.* i, i, p. xi. A fresh element of uncertainty has been introduced into

includes the yellow and red varieties which are also found at the site of Molyvopyrgo on the Chalcidic peninsula; the yellow, which passes into the painted ware of the LH period, does not belong to the earliest phase of Minyan and in Greece appears principally in the Peloponnese. If Troy VI testifies to the expansion of MH commerce, Molyvopyrgo may represent an actual settlement made from Greece.

From a date not very far removed from 2000 to c. 1600 MH culture was spread over the whole of Greece south of Thessaly.¹ There Minyan ware is found sporadically, on a few sites only, and those mostly near the coast. Its focus is in Boeotia, where it occurs in its purest form, though not without an admixture of other varieties due no doubt to local imitation.² In the Peloponnese one of these (Black Minyan) tends to supplant the Grey and is itself finally succeeded by Yellow.

Yellow Minyan, though itself undecorated, forms a link with the 'dark on light' painted ware characteristic of the next period, the Late Helladic. Of this the early ceramic phases (Myc. I and Myc. II A, according to Furumark's, the most recent nomenclature)³ are illustrated in the Shaft-

the chronology of the Near East by the new dating for Hammurabi which the documents recently discovered at Mari have imposed, but on which agreement has not yet been reached. A considerable lowering is, however, certain. See S. Smith, *Alalahh and Chronology* (Luzac, 1940). It is therefore possible that the date for the beginning of MH will have to be brought down from 2100; its end, however, at c. 1600 is reasonably certain, for it depends on the synchronism of LH I with the XVIIIth dynasty in the sixteenth century. The Shaft-graves, the principal monument of LH I, contain a certain amount of the latest Minyan and are therefore reckoned to begin c. 1600. For LH I and LH II ware in Egypt see Wace and Blegen, *Klio*, xxxii (1939), pp. 145-6.

¹ *Preh. Thessaly*, p. 247.

² At Malthi, mainly a MH site with abundant Minyan pottery, only about 200 sherds were of the true Grey variety. These were doubtless, as Valinin holds, imports from the north, the other varieties being of local manufacture (*The Swedish Messenia Expedition*, p. 296).

³ The dating of *BSA*. xxv (pp. 391-2 and cf. p. 316), has been somewhat lowered in accordance with Evans's reduced date for the first appearance of LM I a style in Crete, i.e. 1550 instead of 1580 (*P. of M.* ii, p. vii, n. 1). This was due to the exploration at Knossos of the stratum containing the remains of the MM palace destroyed by an earthquake; objects still unpublished found in it are stated to show traces of Egyptian influences of the early XVIIIth Dynasty, the first year of which was 1580. The date of the catastrophe, up to which the MM IIIb culture was maintained, had therefore to be brought down to 1570 at the earliest and the ensuing 'Restoration' to c. 1595. The LM I a style could hardly, in Evans's opinion, have developed before 1550, and of this style Myc. I is a derivative. The new dating is followed by Furumark in his monumental work of which the first two volumes (*The Mycenaean Pottery and The Chronology of the Mycenaean Pottery*, Stockholm, 1941) have already appeared, and the nomenclature Myc. I, Myc. II A, &c., to describe the pottery, is his. Time and multiple scrutiny are obviously necessary for the full appraisal of the fruits of Furumark's Herculean labours, and much necessarily remains to be cleared up in the forthcoming volume *The History of Mycenaean Pottery*; their scope and method justify, however, the provisional acceptance of his chronology in the main. The period of 25 years (1450-1425) allotted to Myc. II a appears to be too short; we must wait for the third volume to see how it is to be related to the second group of tholos tombs at Mycenae (*BSA*. xxv, pp. 316 ff.). I do not understand why the author without comment classes the solitary 'peg-top' rhyton from Shaft-grave II as Myc. I (*Chron.*, p. 46, under no. 200); Karo definitely states that it is Cretan (*Schachlg.*, p. 70, no. 221) and Wace contrasts the indubitably Mycenaean example from Chamber tomb 517 (*Ch.T.*, pp. 71 and 151, pls. i. 10 and xxx) with the Shaft-grave example and with another from Gournia, *Cl. P. of M.* ii, p. 224.

graves of Mycenae which cover a period estimated at about a century (1600-1500 or 1550-1450), but possibly ending rather earlier. There is one interment which may be safely assumed to have no pottery of either class associated with it, but to which certain pottery undoubtedly belongs which has MM III B and Middle Cycladic parallels of which no other of the Shaft-graves offers an example.¹ This is the earlier of the two depositions in Shaft-grave VI and probably antedates the opening of Myc. I. As we shall see, no great interval separates it from the second or from the single interment in II; these three form a group by themselves. Myc. I ware, of which a single example was found in VI (presumably associated with the second interment), is found in appreciable quantities only at Mycenae itself, where it occurs in the remaining Shaft-graves, and associated with the tholos tombs of the earliest group and with the earliest depositions in the chamber tombs, as well as on the acropolis in the palace area. Nowhere else can it be associated with any change in the life of the community, though on a number of sites it occurs, scantily enough, in MH strata.² Such quantities can represent no more than commercial contacts and doubtless follow the trade routes of the MH period.

Conditions in general remain the same throughout the second of Furumark's ceramic phases, that of Myc. II A, a ware found in small quantities on the sites enumerated above, and in chamber tombs at Thebes in all three tholoi of Kakovatos on the Triphylian coast, in that of Vapheio, and in another at Thorikos on the east coast of Attica, a few miles north of Sounion. In this case we have a completely new form of tomb, but one appropriate only to royal or noble houses; whether it is a symptom of political change or not it is impossible to say, but it certainly does not betoken any change in the population. On the settlement sites—Asine, Zygouries, &c.—MH culture continues without modification. The next phase, Myc. II B, is marked by an extension of range; the tholos appears in the neighbourhood of Volo (Iolkos),³ and the pottery it contains is of this class. So is that found in a rectangular grave with enclosing wall on the neighbouring island of Skópelos (Peparethos).⁴ Both places are convenient ports of call on the route to Troy, where MH ware, imported no doubt from Boeotia, continues throughout the earlier stages of the VIth City, and is succeeded by a scanty trickle of Myc. II A; Myc. II B follows

¹ *Chronology*, p. 46, and cf. *Schachler*, pp. 70-1. See *ibid.*, p. 252, and *P. of M.* i, p. 558, fig. 405, which show Shaft-grave VI. 1 as contemporary with the Temple Repositories at Knossos, i.e. with MM III. Note that the MM III sherds published *ibid.*, pp. 558-9, fig. 445, were not found in Shaft-grave IV, but in the earth of the Grave Circle. Neither Grey Minyan nor MM pottery was found in any Shaft-grave.

² e.g. in the Peloponnese at Asine, Korakou, Zygouries, Malthi; at Megara, and north of the Isthmus, at Eleusis and Hagios Kosmas on the Attic coast, at Eutresis and at Hagia Marina near Chaeronea, and at Thermon. See *Chronology*, pp. 28-9 and 49.

³ *Eph. Arch.* 1906, pp. 211 ff.

⁴ *AJ.A.* 1939, p. 336 (where Skópelos is inadvertently identified with Halonesos), figs. 1 and 2; *JHS.* lix (1939), p. 191. Ancient legend credited Rhadamanthus with establishing on Peparethos a Cretan, Staphylos.

in considerable quantity and finally Myc. III in exceedingly large amounts.¹ So far the range of MH exportation has not been exceeded, but when we turn our eyes to the east and south, we find the rulers of Mycenae striking out in new directions. At Miletus, in strata underlying the abundant remains of the LH III period, ware of LH I and II was found in quantities smaller but sufficient to guarantee the continuous existence of a Helladic settlement from LH I onwards.²

Wace and Blegen have identified as examples of LH I and II (Furumark's Myc. II A and B) nineteen vases found in Egypt and formerly classed as Cretan.³

Whatever commercial centres afterwards arose within the Mycenaean 'empire', it can hardly be doubted that the trade implied by this remarkable diffusion of pottery passed by way of Mycenae, which now for the first time assumes in Greece the leading rôle which it retained till the decline of the Bronze Age. More than that, it marks the first stage in the great trade route which in the sixteenth century and later linked Egypt to Greece, thereafter splitting up into divergent lines which throughout their course to Central and Western Europe are marked by a trail of Egyptian segmented beads of faience.⁴

Returning to Greece, we may pause to examine the characteristics of the one site where Myc. I appears as the characteristic ware of a new culture. Mycenae had long been inhabited. True, there is no trace of neolithic occupation, but that is only to be expected; a rocky knob among the foot-hills of the mountains which separate the plain of Argos from the head of the Corinthian Gulf would have no attractions for that agricultural folk. Situated at the southern end of several natural routes which diverge from it to arrive ultimately at various points on the Corinthian Gulf and having easy communication with the harbour of Nauplia, a gateway to the south and east, it was such a site as the EH people sought, and their sherds have been found there in sufficient quantity to make a period of EH occupation certain. MH ware succeeds and MH graves were found in the slope immediately below the acropolis which also contained the Shaft-graves. No trace survives of the habitations of other periods, so we cannot tell whether the MH folk destroyed the EH settlement or absorbed it.

One of the permanent attractions of the site was doubtless the spring Perseia, perennial and of considerable volume, situated about 300 yards east of the hill on which Mycenae stands, which to-day supplies the village of Charvati down on the edge of the plain about a mile away. From the

¹ *BSA.* xxxvii, p. 11.

² Carl Weickert, *Bericht von dem Vlen Internationalen Kongress für Archäologie* (Berlin, 1940), pp. 325 ff. In view of the statement that the LH I ware shows strong Cretan influence, the possibility of Minoan co-operation must be entertained, and the story that the founder of Miletus was Sarpedon may embody a tradition of the fact.

³ *Klio*, xxxii (1930), pp. 145-6; cf. Pendlebury, *The Archaeology of Crete*, pp. 223-4, and Furumark, *MP.*, p. 663.

⁴ C. Hawkes, *op. cit.*, pp. 345 ff.

military point of view Mycenae occupies a strategic position, commanding various lines of communication and able to maintain a watch on the narrow plain to the west by which the plain of Argos could be invaded from the north; further, the site is naturally strong. These considerations would appeal to the leaders of the MH people. It seems certain that the men who first fortified Tiryns also surrounded the acropolis of Mycenae with a wall, a relic of which has been found.¹

Whether it was the MH people who produced the culture or rather the régime of the Shaft-graves which succeeds to the MH period at Mycenae, or whether it is due to some intrusive element, there is not sufficient evidence to show. At first no very great change is apparent. Six in number, the Shaft-graves, though included within the fourteenth-century fortification wall and surrounded by LH III houses, lay originally outside the inhabited area, in the cemetery of the MH city. MH graves were found immediately adjacent to and even within the Grave Circle, whose enclosing wall was built at the same time as the fortification wall, i.e. in the fourteenth century. The Shaft-graves are evidently the tombs of a royal house which selected part of the MH cemetery then in use.

In some respects the tradition of the MH graves was carried on in the Shaft-graves, but it undergoes rapid developments; every tendency to elaboration in the earlier examples being carried to startling lengths in the later. The earliest, VI, is a plain cist, similar to but larger than the largest of the MH period known to us, designed, however, for a single interment, though it received a second at a not very much later date. One (II) has, like the typical MH grave, only one occupant; thereafter the Shaft-grave assumes the dimensions of a room, designed for not less than three depositions of adults, while IV contains five.² This recalls EH practice, but there are no indications of an EH revival; it may be due to influence from Crete, where collective or small group burial obtains, though by no means exclusively, from the EM period onwards. Already in the earliest of the Shaft-graves there is a notable increase in the grave-goods, some of which are of Cretan origin. By itself the innovation is not enough to indicate any substantial change in the population, since our material is limited to royal tombs; and one funerary custom apparently survived unaltered, though it is one too widely spread to have much significance as evidence of continuity. We have noticed the indications which suggest that the MH people made offerings, presumably of food and drink, outside the tomb. Immediately over Shaft-grave IV Schliemann found a round structure like a well-head built of stone³ for which it is difficult to imagine any function save that of a place where libations were poured so that they

¹ *JHS*, lii (1939), p. 210, and Alan J. B. Wace, *Mycenae*, Princeton University Press, 1949.

² Of the nineteen certain burials the distribution is as follows: in VI, two (men); in II, one (man); in I, three (women); in III, three women and two infants; in V, three (men); in IV, five (two men, three women). ³ Karo, *Schachtgr.*, p. 10, fig. 1, and Schliemann, *Mycenae*, p. 88.

might trickle down to the dead directly beneath. He also found considerable quantities of the bones of animals within the Grave Circle at a depth of 3 or 4 feet. Moreover, Black Minyan continues to be found and Yellow Minyan begins to appear, exactly as they do on contemporary sites where the MH culture pursues its course; there is no break of continuity in the potter's world. The wider range of trade is reflected in certain objects whose occurrence proves some degree of communication, hitherto non-existent, with both western and northern Europe. It is true that the alleged halberd of Western type¹ from Shaft-grave VI can no longer be claimed as evidence in support, since the latest discussion of the article² has shown it to be merely a somewhat damaged dagger-blade of a Minoan type, though perhaps made locally. Specimens of a somewhat different type, however, formerly interpreted as spear-heads, have occurred, one at Sesklo in Thessaly in a tomb approximately contemporary with the earlier of the Shaft-graves, another in Leucas, a third at Asine, and a fourth in the Fourth Shaft-grave.³ At Sesklo a mould for the production of the weapon was also found. These examples are not of the north Italian and to some extent Irish type to which the dagger-blade was supposed to belong, but have closer affinities with Hungary, which suggests a land route of entry for the original model. Those of Sesklo were presumably of local manufacture. Imitation, however, implies a fairly sustained association with the producers or transmitters of the article imitated, and we may note that the sites enumerated lie either on or very near the coast or else on a through route. A second import, this time definitely from the north, is amber⁴ in the form of beads, found abundantly in Shaft-graves III, IV, and V and with some of the earliest burials in the chamber-tombs. It is Baltic amber, and must have come down the Adriatic after making its way across the continent. The largest find yet made comes from tholos A at Kakovatos, which belongs to the period immediately succeeding the Shaft-graves.⁵ After this amber goes out of favour, possibly under the influence of Minoan taste, for the substance found no acceptance in Crete;⁶ a few beads, however, have been recovered from most of the tholoi on the mainland.⁷

¹ Schachtgr., p. 162, no. 938, pl. xcv.

² By Professor Blegen, *Επιστολή Τριών*, pp. 425 ff.

³ This type has on each side of the blade a 'shoe' socket into which one-half of the split haft is thrust and secured by nails. For Sesklo see Tsountas, *Αι προϊστορικοί ἀποσπόμενοι ἀμύμονες καὶ ἔλαινοι*, pp. 334 and 354, and pl. iv, 10; for Leucas, Dörpfeld, *Alt-Ithaka*, ii, p. 315, Beil. 74 a; for Asine, Frödin-Persson, *Asine*, p. 258, fig. 182, 2; for the IVth Shaft-grave, Schachtgr., p. 105, no. 463, pl. cii; cf. p. 207.

⁴ See Schachtgr., Index, s.v. 'Bernstein'.

⁵ *AM*, xxxiv (1959), pp. 278 ff., pl. xv.

⁶ *P. of M.* ii, p. 174; *Tomb of the Double Axes*, pp. 42-4, fig. 57.

⁷ An arrow-shaft smoother from the VIth Shaft-grave is of a northern and extremely widespread type, found over most of Europe and even as far afield as Britain, but its presence does not indicate any fresh contact with the north, inasmuch as specimens have been found in considerable numbers in EH contexts at Asine and Malthi and at Troy in settlements III-V. Schachtgr., p. 163, no. 435, fig. 79; cf. *Asine*, p. 248, *The Swedish Messenia Expedition*, pp. 353-4, fig. 75.

Neither of these imports, however, suggests any change in the population of Greece; they merely testify to the extraordinary development of long-distance trade routes which, as we have seen, is characteristic of this period. The advantages of Mycenae as a nodal point on a trade route were appreciated, as we have seen, by the EH settlers; in the sixteenth century her range was almost incredibly extended.

A more significant novelty than those hitherto mentioned is to be found in the tombstones both plain and carved associated with the Shaft-graves.¹ The latter are the earliest examples of monumental sculpture in Europe,² and they cannot possibly have been imported. It is true that one of the most elaborate shows some very Minoan features, especially in the treatment of a rocky background, but no such tombstones have been found in Crete or anywhere else. Again, the enormous quantity of grave-goods which filled the wealthier of the Shaft-graves marks a change of practice in a vital matter, the relation of the living to the dead; even in the earliest and poorest the break with MH parsimony is marked. The original tenant of VI, not to mention his weapons, had a strip of gold round his skull; the single occupant of II had, besides his arms, a small mug of gold, thin-walled and of a simple and early technique, and a jar of Cretan faience, both probably imports from Crete. The second occupant of VI had a similar gold mug and simulacra in thin gold of the object generally called *Gamaschenhalter*.³ Further, the two most primitive of the sculptured stelai were found over Shaft-grave VI⁴ and one belonging to the next group over II.⁵ This is a real innovation and one with which Crete had nothing to do.

In the matter of grave-goods, III, IV, and V go far beyond anything yet noted and exhibit an important change in the fortunes of the town or at least of its rulers. They contained such a bulk of gold as has never been found in any other excavation before or since, accompanied moreover by bronze in lavish quantities and a considerable amount of silver. Many of the objects are decidedly barbaric,⁶ but the most famous are examples of an extremely advanced art, unmistakably Cretan in style though not as a rule in subject. The mere quantity of gold apart from the presence

¹ *BSA*, xxv, p. 126, pls. xix-xxi.

² A considerably earlier example, however, has been found in Troy I in the shape of a damaged stele on which a human face survives, full front and in low relief (*AJA*, xli, 1937, p. 509, pl. xx). As Professor Blegen observes, it shows no affinity with the art of either Egypt or Mesopotamia. Even if the current dating of Troy I (c. 3200-2500) should be considerably reduced, it does not look as if this monument could be brought into direct relationship with the Shaft-graves, yet in view of the continuous relations of Troy and Greece, it is no extravagant speculation to suspect a connexion between them.

³ For VI, see *Schachgr.*, pp. 160-6; for II, *ibid.*, pp. 70-1, and for the *Gamaschenhalter*, see *infra* section on Graves and Leggings.

⁴ According to Beartley's convincing distribution. The peculiarities of the subject merit attention; see *BSA*, xxv, pp. 136-7, fig. 31.

⁵ Found *in situ*; *op. cit.*, p. 129, fig. 28. The decoration consists of two vertical panels filled with a ribbon pattern.

⁶ *Schachgr.*, Anh., p. 350.

of exotic objects such as ostrich eggs¹ establishes the existence of foreign relations such as were unknown in MH days. The tombstones and the lavishness of the grave-goods alike bear witness to a new power, pride, and self-consciousness in the lords of Mycenae which probably betoken a new and immigrant dynasty.

At first sight it might appear that the new element, if any, came rather from the south than from the north, and this was in fact the view of Evans, who held that the culture of LH I and II, i.e. of the period extending from the earliest of the Shaft-graves to the fall of Knossos, was the result of the conquest (a term which he afterwards modified to colonization) by Crete of mainland Greece or at least of the Peloponnese. The objections to this view appear to be decisive. Of military occupation there is no trace. If Mycenae had been occupied from Crete, Tiryns and probably Asine as well must have been converted into Cretan strongholds to guard communications by sea. That except at Mycenae mainland culture shows no change has already been emphasized; but even at Mycenae, though the impact of Minoan influence is obvious, the culture which emerges cannot be called Minoan or even Minoanized. The women buried in the Shaft-graves cannot be Minoan, for they wear barbaric gold diadems which have no counterpart in Crete.² This is certain, for we have from Crete a remarkably good series of monuments recording women's dress and covering the relevant period. This fact, however, is not by itself conclusive, for Cretan conquerors might marry native princesses as a measure of conciliation and to improve their own title, and it might fairly be argued that the swords, so numerous and evidently so prized, are of Cretan types, as are also the less numerous spears. On the other hand, the unmistakably Minoan workmanship of the most valuable articles, such as the Lion-hunt dagger-blade and the engraved gems and gold signets, proves to be an unreliable argument; the style is Minoan, but the choice of subjects is not. The scenes of war and hunting portrayed on them are foreign to the Cretan repertory in this field of art,³ which preferred peaceful and above all religious scenes in which women figure largely; whereas the occupants of the Shaft-graves seem to have taken practically no interest in religion and representations of women are extremely few in number and are not typically Minoan.⁴

¹ A fragmentary example from IV converted into a rhyton is ascribed by Evans to the period of MM III and in view of the catastrophe of 1570 must have left Crete while the style was still current, unless, indeed, the egg was imported direct from Egypt and converted into a rhyton by a Cretan refugee at Mycenae. See *P. of M.* II, p. 225, fig. 129, no. 5, and *Schachtgr.*, p. 116, no. 567 and pl. cxlii.

² I do not think that Prof. Persson's interesting suggestion that the objects in question are pectorals can be maintained, but even if it is correct, they are equally inconsistent with Cretan women's dress.

³ The dress and equipment, however, are Minoan, consisting of a loin-cloth (not quite, however, of Minoan cut) and the body-shield in its two forms, figure-of-eight and tower.

⁴ *Schachtgr.*, p. 181. Of these some are irrelevant, viz. the women of the besieged town on the Siege vase and a pair of nude goddesses roughly cut out of sheet-gold, since they do not represent the women of Mycenae. The remainder consists of two small rough figures cut out

The Cretan artist is not working for his usual patrons; it remains to be considered whether he is executing foreign orders in Crete or, more probably, has emigrated to Mycenae.

Again, the sudden acquisition of wealth appears to be later than the change of manners which we have observed in Shaft-graves II and VI, and it is in this second phase that the influence of Minoan art becomes apparent. Whence came that wealth? Since Greece is a land of no great natural resources, the source of enrichment must be looked for abroad, and though there was, as we have noted, a remarkable extension of Mycenaean trade beyond the Aegaeon to which it had till then been confined, this can hardly by itself have accounted for the treasures of the Shaft-graves. For so spectacular an accession of riches a natural and obvious cause is the capture and spoliation of some wealthy city, and Knossos, adjacent and unfortified, is the most natural and obvious prey. Further, she had suffered c. 1570 from one of those great earthquakes to which Crete is liable; Mycenae may have attacked and plundered Knossos in her evil hour.¹ (It may be noticed in passing how inappropriate is the moment for the conquest of the Peloponnese by Crete.) It is true that there are no such traces of conflagration in the stratum of the ruined palace as mark the later and more complete destruction of the place c. 1400, but in 1570 there would be no need for man to add to the work of nature. Plausible, however, as the explanation is, it does not account for the spread of Minoan influence in Greece in the period which immediately succeeds that of the Shaft-graves, even allowing for the extraordinarily quick recovery achieved by Knossos. It is conceivable that large numbers of wealthy Knossians, warned perhaps by preliminary earth tremors, escaped to Greece, taking as much as possible of their portable property with them; in such circumstances they might be able to purchase permission to settle. Artists and craftsmen might follow, bringing the implements of their callings.

The political history of a country, however, is, generally speaking, too complicated to be read off in its archaeological record, and all that we are entitled to say is that so far the Shaft-graves offer no evidence that their occupants were men of Crete, though the possibility is not excluded. It may even be said that the series of gold masks, all of men (three from IV

of sheet-gold which wear skirts and the figurine which forms part of a magnificent pin, Minoan in execution, though by no means wholly so in conception; *Schachgr.*, p. 282 and pl. xxx. The famous Great Goddess ring falls just outside the Shaft-grave period; see Helen Thomas, *BSA*, xxxix, pp. 81-2.

¹ Karo ascribes the disaster at Knossos to an attack from the mainland and supposes Mycenae to have recruited her wealth by repeated attacks on various Cretan cities throughout the sixteenth century. There is, however, no such positive evidence for an attack on Knossos on this occasion as there is when she perished by fire, c. 1400. Karo ignores Evans's change in his chronological scheme, which is less favourable to his hypothesis. In any case, it is difficult to account for an interval of 20 years between the catastrophe and the appearance of a LM I and a Myc. I vase in Graves II and VI. See *Schachgr.*, pp. 337 and 349, and cf. *P. of M.*, ii, pp. 287 ff. and 623 ff.

and two from V), offer a definite though extremely limited testimony that some of them were not. The masks are unfortunately not death-masks; they were made on moulds, and the more primitive of them (two from IV) are purely conventional. None the less, Eugen Fischer in a commendably circumspect statement,¹ after calling attention to the elements which must be discounted as due to convention or lack of skill in the craftsman, comes to the conclusion that those which aim at individual portraiture (the third and presumably the latest from IV and the two from V)² have certain common characteristics³ which show them to be representations of members of the 'Nordic' or the Mediterranean race, or more probably a cross-breed uniting the two. This is what we should expect a blend of the EH and MH strains to be, if we are right in assuming a Nordic element in the latter. It will be remembered that we are dealing with royal tombs, in which the Nordic element is likely, on the hypothesis which we have followed, to be present. Cretans would seem in these three cases to be excluded, for two of the masks have moustaches, the third and best known a moustache and a beard of a very peculiar cut. The Cretans, on the other hand, were clean-shaven, as is shown by the evidence of frescoes, steatite vases, and other monuments; whereas the evidence from Greece, admittedly meagre, shows that at Mycenae the beard was regular throughout the Late Bronze Age.⁴ The two remaining masks⁵ from IV appear to have been produced from the same mould and consequently cannot have aimed at portraiture; they represent, however, a clean-shaven face with the eyebrows meeting over the nose. This peculiarity is to-day extremely rare in Europe, common in the Near East, especially Armenia and Persia, and by no means infrequent in Crete. There is therefore a possibility that these

¹ *Schachtgr.*, pp. 320 ff.

² No. 252 from IV, *Schachtgr.*, p. 76 and pl. xlix; nos. 623 and 624 from V, p. 121, pls. li and lii.

³ These are not all observable in frontal representations of the masks; see Fischer, *op. cit.*, p. 322.

⁴ There is no reason to regard the archer on a steatite fragment from Knossos as a Cretan; his bow is European (n. *infra*, p. 279, fig. 35), and the cut of his loin-cloth shows him to be in all probability from the mainland (*P. of M.* iii, p. 106, fig. 59). For mainland beards we have besides the mask the silver cup with inlaid bearded heads from a chamber-tomb (*Eph. Arch.* 1888, pl. 7, no. 2 = Bousset¹, 153-5), the Warrior vase, and the 'Groom' sherd (Rodenwaldt, *Fries*, p. 24, fig. 14). LH III fresco maintains the Cretan convention of beardlessness.

As Karo has pointed out (*Schachtgr.*, p. 186), the only real parallels for the Shaft-grave masks are the gold or gilded masks of Egyptian mummy-cases. We have no knowledge of similar masks in Crete, but no royal tomb of the relevant period has been found undisturbed. Gold masks are not known in Egypt before the New Kingdom, but gilded masks of cartonnage appear in the days of the Middle Kingdom; see, e.g., *Catalogue général des Antiquités égyptiennes du Musée de Caïre, Sarcophages antérieurs au Nouvel Empire*, no. 28109, pl. xxiii; no. 28120, pl. xxii; Berlin, *Ausführliches Verzeichnis der ägyptischen Altertümer*, p. 74, no. 10180, Lepsius, *Denkmäler*, Ergänzungsband, pl. xlv. I owe these references, which by no means exhaust the list, to the kindness of Professor Battiscombe Gunn. Now that commercial relations, apparently direct, are known to have existed at this date between Greece and Egypt, it can hardly be doubted that the Mycenaean masks were inspired by knowledge of the Egyptian practice.

⁵ Nos. 253 and 254, *Schachtgr.*, p. 75, pls. xlvii and xlviii.

two masks represent Minoans; we may suppose, if we please, that wealthy fugitives from disaster in Crete found wives of royal blood at Mycenae.

We may now turn to Professor Carl Fürst's account of the thirteen skulls from Wace's excavation of the chamber-tombs which were capable of yielding definite results, together with eight others found in earlier excavations at Mycenae.¹ While specimens of all three types of cranial index (dolichocephalic, mesocephalic, brachycephalic) occurred, the dolichocephalic markedly predominates, a point of some importance since the skulls are distributed in time over the whole Late Bronze Age subsequent to the period of the Shaft-graves. So far as the evidence goes, it suggests that the same racial type predominated for at least three centuries among those obviously well-to-do people who filled the Kalkani cemetery. Another point of interest is that the male skulls from Wace's excavation are of a stronger and heavier type than is generally associated with the Mediterranean race, that none shows any affinity with it, and only one some degree of approximation to it. Fürst's final conclusion is that while it is impossible to prove that the majority of the people buried in the Kalkani cemetery were of Nordic race, there is nothing in the anthropological evidence inconsistent with the theory.

The question remains whether the peculiar character of the Shaft-grave culture demands for its explanation the immigration of a new stock. Since MH culture remains elsewhere unaffected, we can say with more confidence than in the case of the MH people themselves that there was certainly no large-scale invasion. Yet to account for the sudden change from the peaceful and static condition in which the MH folk appear to have lived, for the striking out along new and adventurous trade-routes, for the sudden enthusiasm for weapons and those of the newest and most advanced type, for the introduction of the war-chariot and in all probability of the horse, the advent of a new and enterprising element seems necessary. Again we naturally look to the region north of the Aegean for the immediate point of departure, nor is there any reason to think that this second wave of aristocratic military leaders was racially very different from the first. Their use of the chariot presupposes some contact with the Near East, most probably with the Hittites of Anatolia.²

Though according to the revised chronology it is necessary to bring down the end of the Shaft-grave period below 1500, it remains true that the dynasty interred in them appears to have come to an end before the era of the tholos tombs. Furumark records Myc. I pottery (c. 1550-1500) from Shaft-graves I, II (actually LM I), III, V, and (associated with the second interment) VI.³ The IVth contained no pottery of this type (*Firnismalerei*).⁴ None of these graves contained any later pottery, with the exception of I; it yielded several vases which closely resemble those of the tholoi at

¹ *ChF.*, pp. 225 ff.

² See below, Ch. V, 10, 'The Chariot'.

³ *Chronology*, pp. 46-7.

⁴ *Schachtler*, p. 252.

Kakovatos¹ and consequently belong to Furumark's second phase, Myc. IIA. They must have been associated with the latest of the three interments. A single belated interment need not surprise us. The grave was originally designed for three persons, probably closely related and possibly not very important. It may be significant that all three were women and that the grave-goods were meagre; hence the exceptional amount of pottery.

It may safely be taken for granted that each tholos was erected, probably in his lifetime, for a reigning prince. The series begins immediately after the Shaft-graves. Myc. I pottery, in the form of sherds which were capable of some reconstruction, was found in the tomb of Aigisthos,² the latest in the earliest group of tholoi, and associated with the two earlier, the Cyclopean and the Epano Phournos. It has been described by Wace, who points out that it is characteristic of the later years of LH I and notes its affinity with that of the tholos of Kakovatos, described as transitional, and the relevant pottery of Shaft-grave I.

The relations between Crete and Greece in the period of the earliest tholoi are obscure. Knossos made a remarkable recovery from the earthquake and any other disasters that may have befallen her; the fifteenth century is a time of great prosperity and artistic activity. In the course of it there was a development of military power hitherto alien to Crete, which had apparently in earlier days enjoyed internal peace and trusted to the sea and her wooden walls for defence against attack from without. This development has its centre in Knossos, where the 'warlike parade' of the great Shield fresco is noted by Evans.³ The destruction c. 1450 of towns in east Crete (Gournia, Palaikastro) and of Phaistos finds its most plausible explanation in the advent at Knossos of a new and martial dynasty which established supremacy over Crete and may have pursued an aggressive policy abroad as well.

¹ Nos. 190-9, *Schachtgr.*, pp. 66-7, pls. clxvii-clxix. Cf. *AM.* xxxiv (1909), pls. xvi-xdvi. Nothing is known of the distribution of grave-goods in I; see Schliemann, *Mycenae*, pp. 155 ff., and *Schachtgr.*, p. 37. Furumark by describing the burials as 'practically contemporary' (*op. cit.*, p. 46) implies that the Myc. II pottery is of the earliest type.

² It is difficult to see on what Furumark bases his statement (*Chronology*, p. 47) that some of the sherds from the tomb of Aigisthos are of early Myc. I type. With one exception the examples which he cites appear to be of the Kakovatos type (*BSA.* xxv, pl. xlviii g, and cf. the parallels cited in his Catalogue of Shapes, under nos. 27, 100, 199, 211 or 218, 224, 248, 254; *MP.*, pp. 585 ff.). The exception is a small sherd from a funnel-shaped rhyton (*BSA.* pl. xlvii s, of which Wace remarks that it appears to be earlier than the only other fragment (*ibid.* b) identifiable as belonging to a vase of similar shape (*op. cit.*, p. 307). There is no reason to suppose that all the pottery found with any given interment was made for the occasion; there would be nothing surprising in finding a vase which had been in use for some time, though not very long, and a ritual vessel, as the rhyton appears to have been, is most likely to have been thus preserved. For the LH I pottery from the other two tholoi see Wace, *op. cit.*, pp. 291-2 and 295-6.

³ *P. of M.* iii, p. 308. Cf. Pendlebury, *The Archaeology of Crete*, pp. 229-30, for an account of the relations between Crete and the mainland in LH I and II and a survey of the conflicting theories respecting them.

At Mycenae, though it is convenient to talk of Shaft-grave dynasty and Tholos dynasty, there is no evidence of any change in the political régime; Tiryns and Asine retain their MH culture, a fact which disposes of any theory of a Cretan conquest. The tholos tomb,¹ whose earliest examples are sufficiently well preserved at Mycenae to allow us to study their architectural development from the beginning, does indeed mark a new departure in burial practice, but its origin is obscure. Until 1939 all attempts to connect it with Crete had failed, but in that year a true tholos tomb, much smaller, however, than any mainland example, was discovered near Isopata in the neighbourhood of Knossos and tentatively ascribed to MM IIL² It cannot be authoritatively dated until the material has been adequately studied; in the meantime its solitary appearance in Crete with neither ancestors nor progeny is an additional mystery.

Simultaneously with the tholoi the long series of rock-cut chamber-tombs begins, the resting-places of the great families as were the tholos tombs of the royal house. In them generation after generation was laid to rest after the same fashion, and though they were apparently rifled of most valuables by the family on the occasions offered by successive interments, such contents as remain compensate to some extent for the total spoliation of the tholoi and show the continuance and intensification of Minoan influence in the sphere of art. This is manifested even more obviously in the material from the ruined tholoi of Kakovatos³ and Vapheio; the first yielded magnificent local pottery decorated in a purely Minoan tradition besides a couple of pieces imported from east Crete, the second the famous pair of Cretan gold mugs with bull-hunting scenes in repoussé and a striking collection of gems engraved in the Cretan style with Cretan subjects, several of them religious.⁴ Two conspicuous examples of this Minoanizing tendency in religion are given by the famous Great Goddess ring,⁵ found in the region just south of the Shaft-grave Circle at Mycenae, and the ring with Goddess and Genii from the Tiryns hoard,⁶ and—most important of all since it can only be an implement of cult—by the famous

¹ On the tholos tombs see Wace, *BSA*, xxv, pp. 283 ff., and *RT.*, App. IV, pp. 149 ff.

² *JHS*, lix (1939), pp. 205-41; *ILN.*, March 2, 1940, p. 284. The peculiar architecture of the tholos tomb is a purely mainland development. The Royal Tomb of LM I date at Isopata, though approached by a dromos, had a rectangular ground-plan, and probably a keel-vault roof; a similar burial vault forms the basement of each house in the Minoan quarter of fifteenth-century Ugarit.

³ *AM*, xxxiv (1909), pp. 302 ff., pls. xvi-xxiv, and for the Cretan pieces pp. 315-17 and fig. 16.

⁴ In a cist fortunately overlooked by the robbers of the tholos. *Epé. Arch.*, 1889, pl. 2, nos. 3-6, 8, 12, 13, 19, 26-7, 32-4, 36; also 39, which is a gold ring. Eleven of these have religious subjects. Cf. *P. of M.*, iii, p. 69, fig. 39, and p. 116; iv, pp. 414, 453, 547, figs. 343 4, 578, and 599.

⁵ *JHS*, xxi (1901), p. 108, fig. 4; cf. H. Thomas, *BSA*, xxxix, pp. 65 ff., especially pp. 80-2. Two seal-stones from a chamber-tomb at Mycenae exhibit the figure of the Great Goddess with the double axe. *CAI.*, pp. 300-1, pl. xxviii, 31 and 32.

⁶ *AM*, lv (1930), p. 121, Beil. xxx, 2.

limestone rhyton in the shape of an animal's head from under the adyton of the Apollo temple at Delphi.¹

In all probability the cause of these changes is to be found in the influx of a considerable number of immigrants from Crete, more numerous than those whose arrival we have assumed in the course of the Shaft-grave period and, in view of the religious changes, probably including women. The destruction by whatever agency of a number of Cretan towns at about this date probably accounts for the influx; if they were attacked and destroyed by Knossos, the welcome which the refugees appear to have received on the mainland is accounted for.² Mycenae with an ambitious trade policy might well fear Knossos as a rival and be glad to admit her enemies, especially if they did not come empty-handed. The immigrants might well do more than give a Cretan colouring to the surface of mainland life; they may even have given an added impulse to the expansive policy which in the fifteenth century carried Mycenaean wares ever farther afield. They may have participated in the settlements at Iolkos and Peparethos, convenient ports of call on the route to Troy; they may even have been already concerned in the LH I settlement at Miletus, in the style of whose pottery a strong Minoan tinge is said to be discernible. The occurrence of LH I ware (contemporary with that of Kakovatos) in Egypt has already been noted; LH II pottery occurs in increased quantity.³ One LH II vase has been found at Ugarit, another at Tell Duweir (Lachish),⁴ forerunners of the LH III ware which occurs in some quantity along the Syrian and Palestinian coasts and in great abundance in Egypt, on the sites of Tell-el-Amarna and Gurob. The presence of LH II ware in Troy has already been noticed; it has occurred at Mylasa and in Rhodes. In the last case the quantity is small, suggesting that the vases had been brought from home by the first generation of Achaian settlers. Cretan ware, on the other hand, is very scarce abroad in this period; there is no Late Minoan at Ugarit, an alleged sherd from Gezer is probably LH,⁵ and

¹ *Fouilles de Delphes*, v, p. 3, fig. 13 b; *P. of M.* ii, p. 829, fig. 542.

² An alternative explanation has been put forward by Dr. Marinatos (*Antiquity*, 1939, pp. 425 ff.). According to his far-reaching hypothesis, the north coast of Crete was laid waste at this date (c. 1500) by a tidal wave caused by the vast volcanic disturbance of which Thera was the centre, followed over a period of years by a series of devastating earthquakes in Crete itself, a sequence of disasters which has been observed elsewhere. As he points out, such catastrophes would inevitably set up a great emigration movement, and he suggests that the Kefiti of Egyptian tomb-paintings are Cretan settlers in north Syria, presumably having in mind the Minoans of Ras Shamra whose burial vaults have been mentioned above. Mainland Greece would be as obvious a refuge and a nearer one. Dr. Marinatos's hypothesis is based on his discovery at Amnisos of a great quantity of pumice-stone apparently deposited by a wave of unusual height in a building near the sea. Since the publication of the article in *Antiquity* Dr. Marinatos has found traces of submersion at Mallia near the north coast some miles eastward; but the range and total effect of the phenomenon it must be left to further excavation to discover.

³ Wace and Blegen, *Klio*, xxxii (1939), p. 137.

⁴ *ILN.*, Oct. 3, 1936, p. 572, fig. 7.

⁵ Wace and Blegen, *l.c.*; *P. of M.* iii, p. 311.

the Egyptian examples number two at most. It would be rash, however, to assume that Cretan trade was in retreat, for the export of Minoan pottery is never voluminous. Crete had other wares doubtless more esteemed, the oil for whose production Knossos was equipped and the finely wrought metal vases which her envoys bring as tribute to the Pharaohs.¹ None the less the 'Minos' who in the latter half of the fifteenth century appears to have ruled all Crete doubtless kept a jealous and watchful eye on his formidable neighbour; possibly it was against the fleet of Mycenae that he found it necessary (if there is any truth in the Cretan tradition recorded by Herodotus)² to man his own with islanders from the Aegaeon. The fifteenth century is at any rate the latest period in which a monarch of Crete can have policed the seas in the manner ascribed to him by Thucydides.³

The extended range of the second phase of Mycenaean culture has already been noted. Vapheio was apparently the site of the royal cemetery of Amyklai in the Bronze Age, and marks its spread into the interior. Kakovatos, situated on the Triphylian coast opposite the end of a pass leading inland, was a port on the amber route, if we may judge by the quantity of amber which was recovered from the tombs, plundered though they were. It may also have been that third Pylos of which a trace lingered in Greek tradition,⁴ the name being appropriate to any town which commanded the access to a pass. From the date of its excavation in 1907 it was a favoured candidate for the rôle of Nestor's capital until the explorations of Professors Kourouniotis and Blegen brought to light one with a stronger claim yet in the immediate neighbourhood of the classical Pylos. Already in 1919 Kourouniotis had excavated at Tragana about 2 kilometers north of Koryphasion, the citadel of the classical Pylos, a tholos tomb which yielded pottery resembling that of Kakovatos. The sites of several other tholoi have been identified within a short radius, principally in the region north-east of the Osmanaga lagoon. Only one, slightly farther afield at Kato Englianos, has been excavated. It was one of a group of three, certainly the tombs of the dynasty which reigned in the palace at Ano Englianos,⁵ and it had been destroyed with remarkable thoroughness in antiquity. So far no account of the pottery, all reduced to fragments, has been published; but the Tragana tholos bears witness to a settlement as early as that at Kakovatos, and the number of unexcavated tholoi to its long life and prosperity.

¹ Such are the unmistakable Cretans on the walls of the tombs of Senmut and Usermion, whatever the homeland of the Keftiu in other frescoes. See Hall in *Essays in Aegean Archaeology presented to Sir Arthur Evans*, pp. 37-8, pl. iii, and fig. 2.

² Herod. I. 171.

³ Thuc. I. 4.

⁴ Strabo, 339; Aristoph. *Knights*, 1059 and scholion ad loc.

⁵ *ILN.*, June 3, 1939, p. 981. With the palace we are not at present concerned, since only the uppermost stratum has been excavated. It perished in a conflagration not earlier than 1200, possibly appreciably later; the large find of inscribed tablets testifies to its importance and its advanced culture in LH III. After its destruction the site was never reoccupied. See *AJA.* xliii (1939), pp. 537 ff., 571 ff.

Dorion (Malithi), some way inland, but easily accessible from the coast at the mouth of the Kyparisseis, midway between Koryphasion and Kakovatos, yielded a fair number of LH I and II sherds, though its own MH culture persisted unmodified.¹

Whatever the relations between Mycenae and Knossos, the rôle of the latter soon came to an end. About 1400 or rather earlier the Cretan city was totally destroyed by a catastrophe from which there was to be no real recovery. Its nature has been disputed and cannot be positively determined. Some interpret it as the result of an earthquake on an unprecedented scale, others as the work of invaders who sacked the city after an attack by sea in which the fleet of Minos succumbed. In favour of the first view is the fact that no foreign occupation ensued; on the other side is the fact that the city was destroyed by fire and that there was no recuperation such as followed on the earthquake of 1570, which suggests that the fleet also had perished. It is true that fire might break out as the result of an earthquake, but the balance of probability is in favour of annihilation by human foes. In the absence of subsequent foreign occupation there is no evidence to determine the identity of the aggressor. The rising power in the Peloponnese is not exempt from suspicion, but the fact that in the immediately succeeding period Mycenae and her outpost Tiryns were heavily fortified suggests that she was exposed to the same danger and that the destruction of Knossos was the first exploit of the Sea-raiders of whose activities at a later date more will be heard.

A marked change in material culture affecting the whole of the Greek mainland is observable in the fourteenth century, and probably some of its features are a direct result of the fall of Knossos. It is possible, however, that others precede it; the sequence depends on the date to be assigned to the rise of the new ceramic style generally known as LH III (= Furumark's Myc. III A, B, and C). An early stage of the fabric is marked by the Tell-el-Amarna deposits, which can be dated to the second quarter of the fourteenth century. Various scholars have thought that the period of twenty-five years is insufficient for the development of the Amarna style from that of evidently earlier LH III vases, e.g. those in the earlier of the styles of Ialysos and others found in Syria and Palestine. None of these admits of absolute dating by direct evidence, but LH III ware from a stratified site, Beth Shan, whose strata could be plausibly though conjecturally related to dated events in other lands was assigned by Albright to 1430, a date reckoned by others as 1425.² By how much the date precedes that of the fall of Knossos it is impossible to say.

In LH III the reaction against the Minoanizing tendencies of LH II is marked; only in a few highly specialized arts, of which the most notable is the fresco-painting of the palaces, does the Minoan tradition survive almost intact. Engraved gems become rarer; divine beings and cult scenes

¹ *The Swedish Messenia Expedition*, pp. 308 and 315.

² *Chronology*, p. 111.

are seldom if ever represented.¹ From ceramic decoration all foreign elements were rapidly eliminated or conventionalized beyond recognition. In LH I and II the decoration of vases consisted mainly of floral and marine motives, often, it is true, strongly conventionalized but always unmistakable, generally on a large scale and often covering the whole body of the vase.² In LH III this type of design was soon superseded by a system mainly linear which made great use of parallel lines and bands and of spirals drawn free-hand. The few marine and floral motives which persist (a generalized flower, octopus, and triton shell, to name the most prominent) are far more strongly conventionalized than before, and often by no means recognizable at a glance.³ The levigation of the clay, however, and the use of the old lustrous glaze paint, red or black according to the firing, go on as before, except that both clay and glaze rather improve in quality. The discovery of kilns at Thebes and Berbati near Mycenae, and of a potter's shop at Zygouries shows that the industry was native and practised over a large area. A new feature is the very large use made of mechanical means in executing a design. The parallel lines and bands which form so large a part of the decoration were produced by putting the vase on the wheel and holding a loaded paint-brush or group of brushes against it while the wheel was rotated rapidly. This is almost mass production and testifies to a great demand for the pottery, much of which was exported. It spreads all over Greece, over Thessaly in a thin but widespread stratum, farther south and especially in the Peloponnese with great density and on thick-sown sites.

In the fourteenth century the outward appearance of the great fortress of Mycenae underwent a transformation.⁴ The huge encircling wall was built, and on the west side, instead of following its natural line above the slope in which the Shaft-graves lie, it was carried right round that long-disused cemetery; the slope was levelled up and the filling secured by a great retaining wall. A ring-wall of slabs was erected round the graves on the new level, and within it the stelai, which had been brought up from their original positions, were re-erected, presumably above the appropriate graves, a clear indication that the ancient dynasty was still held in honour and their graves perhaps regarded as a source of supernatural protection.

¹ Only two LH III gems were found by Wace in his excavation of chamber-tombs at Mycenae as against twelve of the LH I and II periods (in Tombs 515 and 518; see *CAT.*, pp. 203 and cf. pp. 199 and 201). The group of early LH III gems found in the King's cup at Dendra shows good workmanship but no religious subjects; see *RT.*, p. 32 f. and pl. xix, and cf. pp. 38 and 40 and pl. xvii, 2. The three chamber-tombs which were of somewhat later date yielded one engraved carnelian apiece, each with an animal subject. In fresco-painting women continue to figure in Minian dress and engaged in religious ceremonies, e.g. at Thebes (*Deflion*, iii, p. 330, fig. 133; *P. of M.*, ii, p. 748, fig. 483; Bossert³, 40) and Tiryns (*Tiryns*, ii, pl. viii; Bossert³, 34).

² For the Kakovatos pottery v. *supra*, p. 23, n. 3; for other material from Thebes see *Eph. Arch.* 1910, pls. vii-x; *Deflion*, 1917, p. 89, fig. 64, and pp. 142-4 and figs. 104-6.

³ F. and L., pls. ii, xviii, xx, xxxi, and *Cat. F.H.M.* i, i, pp. 182-3 and figs. 253-8.

⁴ For the plan of Mycenae see *CAH.* ii, map facing p. 472.

The Lion Gate was built, in line with a ramp which formed the beginning of a long winding approach to the palace and especially to the new megaron. This approach probably followed for the most part the route to the palace which must have existed in LH I and II, but its course cannot be traced throughout. The form of the earlier palace is unknown; but it is certain that the LH III megaron was an addition to the original plan.¹ There was no room for it where it stood until the fortification wall had been carried along the brow of the precipice some way below and the intervening space filled up. Part of the megaron rested on the artificial platform thus formed, which has not stood the test of time. At some date which cannot be fixed it disappeared down the slope, and a great part of the megaron and half the central hearth went with it. Though it was thus squeezed on to a site not adequate for it, there can be no doubt that the megaron was the chief official apartment of the palace. The winding ascent which began with the ramp above the Shaft-graves is traceable at its topmost level. Just outside the palace it culminates in a stately staircase which gave access first to an audience chamber and by way of it to the courtyard and megaron. For residents there was more direct access, but all foreign visitors would be introduced by the route described. There is nothing to show whether the earlier palace had a megaron or not; if there was one, it must obviously have been on another part of the site. Nor is it, strictly speaking, known whether or not there was an earlier fortification wall. It is, however, inherently improbable that so wealthy a city would be left unprotected, and the already cited example of the MH fortification wall at Malthi made it virtually certain that the Mycenae of the Shaft-graves was not less well equipped even before the British excavations of 1939 revealed what can hardly be anything but a relic of the actual wall.² The area embraced cannot of course be determined, but must have been relatively small.

The spectacular quality of the fortifications of Mycenae and of the contemporary and closely similar walls of Tiryns is puzzling. The strength of the defences seems out of all proportion to any attack that could be made on them with the means available at that date. Even in the Near East, where the art of war had been highly developed, there is no evidence for the use of siege-engines before the second rise of Assyria to power in the ninth century, and it is inconceivable that they should have been used in Greece. Yet not only are the fortifications of both Mycenae and Tiryns massive beyond any apparent need, but those of Tiryns were twice elaborated and still further strengthened in the course of at most little more

¹ Mainland architecture was profoundly and permanently influenced by that of Crete. Native as the megaron is to the mainland and alien as it is to Crete, such a palace as even in its devastated condition we can see that of Mycenae to have been in the Third Late Helladic period is unthinkable without a thorough schooling in the principles of Cretan architecture; this is most likely to have been received in LH II. See *BSA*, xxv, pp. 266-8.

² *v. supra*, p. 15, n. 1.

than a century, possibly less. Probably the downfall of Knossos made all cities and fortresses within striking distance of the sea uneasy. If Minos had indeed policed the Aegaeon, and if it was indeed Mycenae who broke down Crete's control of the sea, she knew better than anyone else the risk run by an unfortified city: if some other power was responsible, then Mycenae had reason to dread that power in her turn. At any rate, it cannot have been any imaginary peril which inspired this feverish defence activity;¹ and it is clear that what was feared was attack by sea. Mycenae was evidently an administrative centre, for made roads capable of taking wheeled traffic radiate from the Lion Gate.² The culverts, the supporting walls, and the bridges which mark their course are built in exactly the same style as the fortification wall, and that is the only material for dating them; but in the absence of any conflicting evidence it is sufficient. It was not the policy of archaic or classical Greece to make roads on a large scale and so provide easy military communications; that was the last thing which the small independent states of Greece wanted. Their safety lay in as high a degree of inaccessibility as was compatible with meeting the needs of everyday life; and much more intercourse was carried on by sea than would have been possible for a land with a less extensive and indented coastline.

If we examine the indications of direction given by the surviving traces of the Mycenaean roads, we can conclude with reasonable certainty that they ran as follows. One went south towards the Gulf of Argos, crossing the stream Chavos by a bridge about half a kilometer below Mycenae; there we lose sight of it, but it probably forked, one branch running by way of the Mycenaean settlement on the site of the later Heraion to the important fortress of Midea and so on to Asine, and the other and more important straight to Tiryns and so to Nauplia, Mycenae's only serious harbour. At Asine, however, there is at least fairly well-sheltered anchorage, and hostile troops could be landed there at the seaward end of an easy route to the plain of Argos, if the place were left unwatched. It is therefore not surprising to find that Asine is a well-fortified site and that the road from it to Mycenae was protected by the fortress of Midea.³ Finally, there was a good look-out station commanding the Gulf on the Larissa,⁴ an extremely

¹ We may compare the rapid development of large-scale fortification in the first half of the fourth century, a direct result of the Peloponnesian War.

² Steffen, *Karten von Mykenai*, pp. 3 ff. and map 1.

³ Asine appears in the Kingdom of Diomed in the Catalogue. It continued to be inhabited, as so well situated a little port naturally would. On the other hand, the whole *raison d'être* of Midea, perched on a rugged hill-side, disappeared when the Achaean power collapsed. All we hear of her is that Argos reduced her, like Mycenae and Tiryns, to a *schizon*. The inhabitants, like those of Mycenae and Tiryns, probably moved elsewhere. There is no mention of Midea in the Catalogue.

⁴ A block of sawn conglomerate from Mycenae built into the wall of the Frankish castle together with other remains, including the lintel of a gateway, testifies to the existence of a building of importance on the site in LH III. See *BSA*, xiv, p. 247, and Vollgraf, *Arch. Argonum*, pp. 6-7 and pls. xi-xiv.

abrupt height above the classical and modern Argos now crowned by the ruins of a Frankish castle. Thus Mycenae's security against attack by sea was guaranteed. To the north the roads led by three main passes to the Gulf of Corinth, passing apparently by Tenea, Cleonae, and Nemea. On the opposite side of the Corinthian Gulf harbours on the Boeotian coast are the starting-points of roads which lead, one of them by way of Eutresia, to Thebes.¹ At home then Mycenae appears in a new rôle as a military and administrative centre with a system of communications which implies some kind of supremacy at any rate over the Peloponnese and close relations with Boeotia.

The other new feature of note is her colonizing activity in the Aegaeon and the east Mediterranean and the simultaneous development of trade with Italy and Sicily.² That the process began before the fall of Knossos is proved by the discovery in the neighbourhood of Ialysos of a Minoan (LM I-II) settlement on which is superimposed a third in which the pottery is LH II.³ LH II ware had already reached Egypt, apparently by way of Syria and Palestine. Similarly, except in the case of Miletus, we cannot at the moment determine the precise stage at which LH settlements were founded on the Ionian coast and the neighbouring islands. Sites had been or were now chosen which became important at a later date as those of Hellenic cities—Miletus, Colophon, Cos, and some yet undetermined place on Samos. There is one, however, which the Greeks failed to keep or regain. In 1938 the Swedish excavators found at Mylasa a settlement of LH III date with a stratum containing LH II sherds underneath it, but no trace of Hellenic occupation above. Our information from the other sites is meagre, fragmentary, and tantalizing in the highest degree. At Miletus the LH III remains were abundant, suggesting a prosperous community of some duration; they were succeeded by proto-Geometric and Geometric sherds in no great quantity, but sufficient to indicate continuous Greek occupation.⁴ Thus a fresh perplexity is added to the entry in the Trojan Catalogue, where Miletus figures as a seat of *Kāpes βαρβαρόφωνοι*.⁵ In the city of Cos proto-Geometric and Geometric graves have been found sunk in the upper levels of a settlement which also contained abundant LH III ware and was of some considerable duration; the lower levels are as yet unexplored.⁶ On Samos LH III graves have been found, and in the neighbourhood of the Great

¹ *BSA*, xxvi, pp. 36 ff.

² See Wace and Blegen, *Klio*, xxxii, p. 136, n. 5.

³ *Clara Rhodet*, x, pp. 48 ff. Here is a possible point of departure for Schaeffer's 'Cretanized' Mycenaeans of Ugarit.

⁴ Weickeri, *Bericht von dem V ten Internationalen Kongress für Archäologie*, pl. xxv.

⁵ B 867-8. The only other mention of *Kāpes* in Homer is in *K* 428, where they are enumerated among the allies of Priam, but there is no mention of Miletus. It is permissible, in view of the neighbourhood of Mylasa, to hazard the speculation that at some date after the disappearance of the LH settlement there, Miletus fell for a time under Carian domination.

⁶ *JHS*, lxx (1945), p. 102.

Altar of the subsequent Heraion 'prehistoric' buildings and a stratum of LH III sherds, succeeded by proto-Geometric and Geometric.¹ None of the LH III or proto-Geometric pottery has been published; all that is so far known of the latter ware on the east side of the Aegæan comes from Assarlik near Halikarnassos, a settlement which has no previous history and does not survive into the Geometric age.² Possibly its inhabitants sought greater security on Cos. Finally, the American excavations on the site of Colophon in 1922 revealed a Mycenaean tholos tomb and a Geometric cremation cemetery;³ unfortunately in the course of the Greco-Turkish war they were broken off and the museum material was lost. The question therefore remains open whether in this case there was a total withdrawal of the Greeks followed by re-entry at an unknown date in the Geometric age.

The apparent continuous occupation of several sites raises the question of the *κρίσις Ἰωνίας*, the Ionian migration dated by the Greeks as 140 years after the fall of Troy, i.e., according to the Trojan era of Eratosthenes, in 1044/1043. Was there in fact a brief withdrawal at the end of the Bronze Age, followed by a return at first slow and on a small scale? In view of the Carian occupation of Mylasa this seems probable enough. The first step to an answer will be taken when the proto-Geometric sherds from the relevant sites are studied and published and it can be said whether or no they can be directly affiliated to the preceding LH III ware; so far there has been no mention of a sub-Mycenaean phase.

Eastwards, as has been said, colonies were planted in Rhodes and Cyprus, on a scale sufficient in the first case to supersede and in the second to dominate the native culture, and also at Ugarit (Ras Shamra), where the Mycenaean element formed a quarter of its own in the Syrian city. At some point in this period Cyprus appears for the first time in recorded history; the Tell-el-Amarna tablets include eight letters from the king of Cyprus to the Pharaoh,⁴ possibly Amenhotep III, more probably his successor Akhenaton, the heretic king. It is the only period in ancient history known to us in which Cyprus was united under a single ruler; possibly the poet of the *Odyssey* drew on a Greek tradition of it when he sent Odysseus to a king of Cyprus with a Greek name and patronymic.⁵ On one occasion⁶ the king of Cyprus complains of attacks by the Lukki, who

¹ *A.A.*, 1933, p. 251; *A.A.*, 1938, p. 580; *A.M.* lviii (1933), p. 144.

² *JHS.* viii, pp. 64 ff.

³ *A.J.A.*, 1923, p. 67.

⁴ i.e. if we accept the identification of Alasia with Cyprus, which appears practically certain; see Schachermeyr, *Klio*, xvii (1921), pp. 230 ff. The letters in question are 33-40, Knudtzon.

⁵ 442-3; the solitary reference to Cyprus in the *Iliad* (A 28-1) contains no implication that Kinyras was sole king or indeed king at all. Attempts to prove that some of the proper names cited by the king of Alasia (letter 37) are Greek have not met with acceptance. With the exception of the last, which may be Semitic, they are apparently neither Greek nor Semitic, presumably therefore indigenous. See Knudtzon, *El-Amarna Tafeln*, i, pp. 291 ff.; ii, pp. 1082 ff.

⁶ Letter 38.

are universally identified with the people called Lukioi by the Greeks; these were held in antiquity to have emigrated to Anatolia from Crete.¹ The fall of Knossos may have been the occasion of their going, in which case they may have felt that they had scores to settle with the representatives of Mycenae. We have at all events an example of the kind of attack against which Mycenae and Tiryns were fortified.

In Egypt LH III pottery in some quantity occurs at Tell-el-Amarna, being thus datable within narrow though by no means agreed limits to the reign of the heretic king; at Gurob there appears to have been a small settlement, perhaps combined with other foreign elements. LH III ware was abundant at Phylakopi in Melos, and the contemporaneous building of a megaron suggests that a colony was planted there. In Troy VI till the date (c. 1350) of its destruction the same pottery was frequent.

Though the question has not yet been put to the test of excavation, it is reasonably certain that at some date the Mycenaean had a settlement in the Pamphylian plain. Whether it represented the expansive movement which carried them to Rhodes and Cyprus or a later, less triumphant, wave of emigration which left a short-lived settlement in Tarsus can only be decided by the spade; what is certain is that the Greek of the Pamphylian inscriptions, barbarous as it is, is yet sufficiently closely related to the dialects spoken in the historic period in Arcadia and Cyprus to be reckoned as a third member of the group,² a fact whose implications must be further discussed below. Aspendos, in those days doubtless accessible to sea-going ships via the Eurymedon as was Tarsus via the Cydnus, would offer a suitable site for colonization at either date.

The empire of Mycenae, if we may so call it, was shortlived. In the thirteenth century the quantity of pottery exported drops sharply. Very little indeed goes to Egypt and Egyptian objects cease, or all but cease, to be found in Greece. The fact that the fortification walls of Tiryns were twice elaborated and were complete by a date probably about the middle of the thirteenth century suggests that the place was threatened from the first. At the same date Mycenae apparently found herself menaced by a fresh danger, this time from the land and from the north. Hitherto she had taken no measures to guard her water-supply. The main needs of the city must always have been met by the water of Perseia and similar springs in the neighbouring slopes, where they are fairly frequent. It appears certain that these supplies were collected, brought to a point as close as possible to the wall, and thence fetched by way of the North Gate, a feature of the

¹ Herod. vii. 92.

² See A. Meillet, *À propos d'une histoire de la langue grecque*, ed. 2, pp. 60-1. As Dorian influence is also apparent in the inscriptions, it would seem that here, as in Rhodes and many other places, the Dorians settled on sites already occupied by the representatives of Mycenae. Bechtel prefers to regard the original settlers as having been Dorians from Crete, where the invaders' dialect has certain features common to Arcado-Cypriot, but his view has not been generally accepted (*Gr. Dial.* ii, pp. 796 ff.).

fourteenth-century fortification wall doubtless designed as a water gate, and strengthened by a flanking tower. In the thirteenth century this protection was felt to be insufficient; at the north-east angle of the fortification wall a great bastion was built and within it a staircase was sunk leading ultimately to a cistern far underground and well outside the wall which must have received the water of Perseia.¹ Centuries later it was still a source of supply; hence it was that Pausanias believed himself to have seen the spring itself among the ruins of Mycenae. For the greater part of its course (which extends in all to some 40 yards) the staircase is vaulted precisely after the fashion of the Tiryns gallery; this and the fact that the bastion is a manifest addition to the original fortification wall fix the date with certainty. At the same date great efforts were made at Tiryns to secure as well as might be her completely exposed water-supply.²

The bastion of Mycenae served a further purpose, viz. that of covering the road which runs through the pass to Berbati, which we have seen to be an important LH III community, and turns north to reach the Corinthian Gulf by way of Tenea. This road had been safe enough while Mycenae was mistress of the Peloponnese.

Though there is no cultural break within the limits of LH III, certain novelties appear which will be fully discussed in the appropriate places, but must be briefly enumerated here. First comes the slashing sword which wholly supersedes the rapier, and secondly the fibula. In neither case can the first appearance be dated, save to the extent that both are absent from the well-furnished tholos tomb at Dendra, which contains several rapiers; it falls within the first half of the fourteenth century, probably almost at the beginning. At Ugarit the production of the new type of sword goes back to 1300, possibly farther. For the fibula there is nothing more precise than its absence from the Dendra tholos,³ nor is there any evidence that it appeared simultaneously with the slashing sword or from the same quarter; it is in fact regarded by some archaeologists as an invention of the Achaeans. Other changes in dress and equipment are known to us solely from their representation in art, and for this we are indebted almost wholly to a change in the style of vase-painting, which itself betokens a certain change in outlook. In LH I and II mainland vase-painting followed almost without modification the Minoan convention of admitting no representations of living creatures other than marine, making

¹ Karo, *AJA.* xxxviii (1934), pp. 123 ff., pls. xii and xiii; Paus. ii. 16, 6, and Frazer *ad loc.*; in the Commentary (vol. iii, p. 161) 'north-west' at the end of line 9 is an error for 'north-east'. Karo makes the interesting comment that the collection of the water in a deep-sunk cistern whence it had to be carried argues a complete ignorance of hydraulics, a science with which the Cretans of Knossos appear to have been familiar some centuries earlier. See *P. of M.* ii, pp. 460-2 and 582, and iii, pp. 241 ff.

² Tiryns, iii, pp. 49 and 66-7.

³ Persson's interpretation of a fragment of gold and another of bronze from Chamber Tomb 2 (*Royal Tombs*, p. 102) as parts of fibulae of a sub-Mycenaean type is an error, and has not found acceptance.

only a rare exception in favour of birds.¹ In the first half of LH III vase decoration becomes, as has been said, almost wholly linear. At a date about the middle of the thirteenth century or rather later a new style appears which portrays both animals and human beings and has in its most ambitious examples a monumental quality which suggests a model in fresco-painting.² To this group belong the Warrior vase³ and a number of invaluable fragments from Mycenae,⁴ as well as a few sherds from Tiryns, including the famous fragment with chariot and warriors.⁵ This last, though later than the Warrior vase, falls within the limits of the Mycenaean age. On none of these monuments does either form of body-shield occur; each warrior has a small shield, generally round. The types of helmet are new; one (that on the obverse of the Warrior vase) may have been designed to give better protection against the slashing sword. Some features, e.g. the fringe on some of the warriors' tunics and the *σαυρωτήρ* of a spear on the Warrior vase, suggest Oriental influence; the round shield certainly reached Greece from farther east.

Finally, and appreciably later, the bathroom at Tiryns, a carefully planned adjunct of the Second Palace, went out of use before the end of the Bronze Age. This is proved by the fact that the small court adjoining it through which the waste water was conducted by an open conduit to join a main drain was filled up by an accumulation of rubbish consisting mainly of broken pottery which blocked the escape of the water.⁶ To Schliemann, who excavated both court and bathroom, the place seemed to have been used as a rubbish dump; but as he unfortunately did not make an inventory of the pottery found, there is no clue to the length of time involved. Only two objects are specifically mentioned by K. Müller—the fragments of the Bull-leaper fresco, presumably discarded some time before the end of the palace régime, and the sherd of the chariot and warriors which though late still belongs definitely to LH III. As Müller points out, the abandonment of the bathroom indicates a stage of culture lower than that of the period in which the Second Palace and the fortifications were built and elaborated. The time is too short for such a change by mere process of degeneration, and there is no evidence of any general disaster. So far as we can tell, the change is confined to the palace and is such as might be brought about by a change of dynasty. It is perhaps not

¹ Bossert, fig. 127.

² This is questioned by Furumark, who points to the fact that such remains as we have of LH III fresco-painting are all in the Minoan convention, of which, as he holds, the vases show no trace. This is true of the Warrior vase, but various sherds give evidence of contact. The chariot, horse, and groom are subjects common to both arts; compare *BSA*, xxx, pls. xxvi and xxvii with Rodenwaldt, *Fries der Megaron*, p. 24, fig. 14. Compare also the treatment of a horse's mane in F. and L., pl. xli, no. 429 a, with that of Tiryns, ii, pl. xiv, 3, and the bust and arms of a woman on a sherd (F. and L., pl. xli, no. 426) with the lady of the Tiryns fresco (Tiryns, ii, pl. viii).

³ F. and L., pls. xli. and xliii.

⁴ F. and L., pls. xxxviii, xl, and xli.

⁵ Schliemann, *Tiryns*, pl. xiv and pp. 353-4; Bossert, figs. 133-6.

⁶ Tiryns, iii, pp. 210-11; cf. Schliemann, *Tiryns*, pp. 229-30.

fanciful to recall that Tydeus was an immigrant from Aetolia into the Argolid¹ and that the realm of Diomedes as given in the *Catalogue* cuts off the lord of Mycenae from that direct access to the sea which Tiryns was originally fortified to secure.

This change at Tiryns apparently falls very late in LH III, but more widespread symptoms of progressive decline can be observed from the beginning of the thirteenth century onwards. Relations with Egypt come virtually to an end with the accession of Ramses II.² The importation of Mycenaean ware into Cyprus ceases,³ though its influence lives on in a local ware produced side by side with others in the genuine native tradition. In other quarters, however, Oriental relations continue, if we accept the identification, so effectively rehabilitated by Schachermeyr, of the Ahhijava of the Hittite inscriptions with the Achaeans. In these sources we have evidence of fairly close intercourse maintained between the two powers in the thirteenth as well as the fourteenth century; for example, an Achaean prince is recorded as having stayed at the court at Boghazkeni to learn chariot-driving.⁴ Material culture, too, shows some traces of Hittite influence in LH III; the entrance of the Hittite temple excavated by the Turks at Giaour Kalesi bears a striking resemblance to the entrance of a typical tholos tomb on the mainland of Greece. Legend also plays a part. Though we know the tradition only as post-Homeric, we may remember that Pelops, according to Homer the grandfather of Agamemnon, according to a later story the great-grandfather, came to Greece from Asia Minor either two or three generations before the siege of Troy.

At Tarsus the Achaeans seem to have actually effected a settlement not very long before the fall of the Hittite empire, c. 1200,⁵ LH III ware of a late type having been found on the site. Despite its ultra-mythological form, the Greek tradition that Tarsus was founded by Argives⁶ may be based on this event. Though apparently successful, the adventure cannot be compared with the occupation of Cyprus, but must rather be viewed in connexion with the unsuccessful invasion of Egypt by the Libyans, Achaeans, and others. In any case the settlement was shortlived, vanishing with the Bronze Age; as in western Anatolia, the Greek pottery next seen in these regions is of Geometric date, and here it is Late Geometric.

¹ *J* 113 ff.

² *v. infra*, p. 87.

³ See J. F. Daniel, *AJA*, xli (1937), p. 81.

⁴ F. Sommer, *Die Ahhijava-Urkunden*, Abh. d. Bayer. Akad. Phil.-hist. Abt. N.F. 6, p. 11, Tavagalavabrief II, 58-61.

⁵ *AJA*, xli (1937), pp. 263 and 279 ff., especially J. F. Daniel's note on p. 263, figs. 38-41. In a subsequent remark (*Hesperia*, Suppl. vii, p. 169) the excavator Miss Goldman states that the quantity does not justify the hypothesis of a Mycenaean settlement and adds that it is associated with clusters of havel, conditions which seem not inappropriate to a refugee settlement. Mycenaean sherds in very small quantities were found at Mersin in levels dating immediately before and immediately after the fall of the Hittite empire. See R. D. Barnett, *LAAA*, xxvi (1939), pp. 100 ff., and cf. Garstang, *AJA*, xlvii (1943), pp. 1 ff.

⁶ Strabo, 673; cf. Daniel, c.l.

Though restricted both in range and quantity, Mycenaean pottery was exported to some extent in the latter part of the thirteenth century and even later. Frequent in Troy VI which fell c. 1350 as the result of an earthquake, it continues to be imported into Troy VII A, the diminished city which the survivors of the earthquake planted among the ruins of VI.¹ It is true that most of the painted sherds seem to represent a local variety, but the mainland product persists alongside of it. At the beginning of the twelfth century, contemporaneously with the collapse of the Hittite empire and the advance of the Sea- and Land-raiders against Egypt, VII A was destroyed by fire; in view of this evidence it must take the place of VI as Homer's Troy. There was a measure of reconstruction, and in the first phase of VII B LH III ware of the very latest class (Granary) was imported in small quantities.² Then came the intrusion from Europe of a new population, who brought with them a culture of the Lausitz type with its characteristic *Buckelkeramik*. There is nothing in the archaeological record to suggest that the destruction of Troy by Greeks was a subsequent fiction; on the contrary it is established as an historical event which occurred at a suitable date and while Greeks and Trojans had relations with each other. This being so, we are entitled to speak of the *Iliad* as offering evidence of a different kind. That it rests on ancient tradition is unquestioned; that which it embodies ascribes the destruction of Troy to a confederation of the Greeks of the mainland and a few of the islands, and this was believed implicitly by all Greeks of all periods. There is no counter-tradition. According to the story, Greece had no design of conquering or occupying territory beyond the Aegean. Exhaustion after an overseas expedition which had ended in nominal victory but had overstrained her resources would account for the rapid decline of Mycenae in the twelfth century and her destruction at some date in the second half of it.

The most salient points in the archaeological history of Bronze Age Greece have now been reviewed in however summary a fashion, and we are now in a position to consider at what point or points in it there is such a break in the continuity of culture as would indicate the entry of a new population in sufficient force to spread the Greek language over the area concerned. The chronological limits within which this must have happened are fairly wide. The earliest possible date is, as we have seen, that of the invasion of the MH people. To their language we have no direct clue, since there is no evidence by which they can be associated with any particular type of place-name; their claim to be the introducers of the Greek language can be supported only by the elimination, absolute or probable, of other candidates. That Greek was

¹ To this period belong the earliest sherds found at Vardaroftsa, on the banks of the Vardar, some 20 miles from its mouth. See *BSA*, xxvii, pp. 21-2, fig. 10.

² *BSA*, xxxvii, p. 11.

generally spoken on the mainland by 1400 can be established with virtual certainty. Cyprus was colonized from Greece in the first half of the fourteenth century, as is shown by the vast quantities of Mycenaean pottery of that period found on a large number of widely distributed sites and by the absence of any independent contemporary culture. We may anticipate so far as to call the colonists Achaeans. In historic times one and the same dialect of Greek was spoken in Arcadia and in Cyprus and nowhere else, except in the half-way house of Pamphylia,¹ where it is found in an extremely corrupt form. As Cyprus certainly was not colonized from Arcadia, it is a fair inference that by c. 1400 the common ancestor of Arcadian and Cypriot was the main language of the Peloponnese, which (since at whatever date it came, it must have come from the north) means the main language of Greece. The occurrence in Cyprus of Peloponnesian place-names—Asine (Argolid), Keruneia (Achaia), and Lakedaimon—suggests that the main emigration was from the region in which the chief seats of Achaean power were situated.² The cult of Apollo of Amyklai was brought by the settlers to Cyprus, and an inscription recording a dedication to Perseus suggests a cult connected with Perseus similarly transferred.³

The specific statements of ancient authors⁴ about various Greek foundations in Cyprus may sometimes embody genuine local tradition, but they are mostly of a dubious character. For the apparently general belief that that colonization began *μετὰ τὰ Τρωικά* archaeology offers no support and the names of all oikists are to be regarded with suspicion. Individual immigration from Greece there may well have been in the period of Mycenaean disintegration, but never in such volume as to affect the material culture of the island, or appreciably modify its dialect. There can be no doubt that the colonization was carried out in the Late Bronze Age and in the main by Achaeans of Peloponnesian origin.⁵

¹ Here also there must have been an Achaean settlement, but there is no evidence respecting the date of its foundation. The Mycenaean stratum in Tarnus belongs to the latter part of the thirteenth century at earliest. See *AJA.* xli (1937), pp. 281-3.

² To these may be added Epidaurum (Pliny, *NH.* v. 130), which I add from Professor Gjerstad's list (*Opuscula Archaeologica*, iii, 1944, p. 114). It is an interesting though subsidiary point that in the Doric of Crete, where Homer tells us there was an Achaean community, and of Rhodes, where there were large LH III settlements and where an inscription records that the acropolis of Ialysos was called Achaia (Dittenberger, *Syll.* 338, 17), traces of the Arcado-Cypriot dialect survive; see Bechtel, *Gr. Dialekte*, ii, p. 649, § 76 (Rhod.), and p. 766, § 177 (Cretan).

³ *Ibid.* i, p. 451 and pp. 417 and 453.

⁴ The principal passages are: (a) Herodotus, v. 113, vii. 90; Curium was founded by Argives; Arcadia, Cythrus, and Athens and Salamis were all represented in the population of Cyprus. The statement about Athens and Salamis doubtless rests on nothing more than the name Salamis. (b) Strabo, xiv. 6. 3 (682) states that Lapethos was a Laconian foundation and mentions *Κρομμύου δεσπῶ* and *Ἀγαίου δεσπῶ*, the latter as the landing-place of Teukros, founder of Salamis. We may prefer to think of it as a depot for Mycenaean ships on their way to or from Ugarit. Krommyon may represent a settlement from the Megarid. (c) Paus. viii. 5. 2 and 3, and Lycophron, 586 ff., state that Paphos was founded by Arcadians under Agapenor.

⁵ Since my attention was called to Professor Gjerstad's article, 'The Colonization of Cyprus in Greek Legend' (*Opuscula Archaeologica*, iii, 1944, pp. 107 ff.) only after my manuscript was

That the opening of the fourteenth century saw great changes at Mycenae and Tiryns as well as a diffusion of LH III culture far wider than that of LH II had ever been and extending over practically the whole of Greece has already been noted. We must ask ourselves whether these changes rather than the appearance of the MH culture mark the arrival of the first Greek-speakers in Greece. Are they to be interpreted as the result of a sudden large-scale invasion of Achaeans from the north who overran and occupied Greece, overthrew Knossos, and pushed on to found settlements on Rhodes and Cyprus, at Ugarit, and in Egypt before the vigour of their advance was spent? Actually we find that they point rather to a re-emergence of the native stock and a recrudescence of the culture which had on some sites, but by no means universally, been overlaid by the strongly Minoanizing régime of LH II. The most conspicuous changes at Mycenae and Tiryns are the building of the great fortification walls and the *megara*; and fortification walls and *megara* are no novelty in Greece: they were introduced by the MH people. The linear decoration of LH III pottery has a precursor in the geometric designs of the matt-painted vases of the MH period; geometric schemes had no doubt lived on, ornamenting the wooden, leather, and textile belongings of the peasants. Nowhere is there any such indication of armed invasion as marks the advance of the MH people by the widespread destruction of EH settlements. There is nowhere any change in burial customs. The orderly development and perfecting of the tholos tomb proceeds, and the type spreads far beyond the confines of Mycenae. In the chamber-tombs of Mycenae and other sites fresh depositions are made in the same manner and the earlier ones are not disturbed, though there is often planned rearrangement to provide more space. The enclosure of the Shaft-graves within the new fortification wall shows that Mycenae was conscious of the continuity of the city's history. For the entry of the Greek language into Greece we must go farther back than 1400.

We have already noted the possibility—it may perhaps be called a probability—that the originators of the Shaft-grave culture were newcomers in the land. Even if they were, it can hardly be they who introduced Greek, though they may well have been Greek-speakers. If they were new arrivals, they must have been few in number—too few to accomplish the task of spreading their language over the land. It has already been noted that one reason why the Indo-European type of language has triumphed over so large a region is that it is a clearer and simpler medium of communication than the types which it has supplanted; true also that it has sometimes been imposed over large areas by small bodies of conquering invaders. It is also true that such a band of invaders would not necessarily leave any mark on the material culture of the conquered land since,

in the hands of the printer, it seemed best to reply to the arguments by which he supports a different view in a separate note, which will be found at the end of the chapter.

belonging to a military caste, they would be unlikely to affect indigenous handicrafts. To diffuse their language in such circumstances, however, the conquerors must be widely, if thinly, spread and must exercise some form of continuous control over the area concerned. There is no evidence whatever that the people of the Shaft-graves were in the position occupied by the rulers of Mycenae in later days. The peculiar culture of the Shaft-graves is found nowhere else in Greece; a single isolated community cannot have been the agent in the spread of the Greek language over the country. As the first Greek-speakers therefore the MH folk or their leaders remain in possession of the field; the lords of the Shaft-graves, even if intruders, may be assumed to have spoken—or learned—the same tongue. Besides the language, certain permanent elements in Greek culture can be traced back to the MH stock or to their leaders. The Greek temple is the direct descendant of the MH megaron house, and single depositions in cist-graves remain to the end the predominant method of burial in Greece.

The fall of Mycenae, presumably before the invading Dorians, marks the total collapse of the Achaian régime in central Greece and the Peloponnese. It cannot be precisely dated, but it is safe to say that it falls in the second half, probably the last third, of the twelfth century. For some time before her fall Mycenae and the Mycenaean world had been in a state of decline. Intercourse with the outer world had all but ceased. No building at either Mycenae or Tiryns can be dated to this period. The pottery is extremely poor and degenerate; only one class, in the so-called 'close' style, pretends to anything that can be called decoration.

That Mycenae was violently destroyed at the end of LH III and not merely deserted, as Tiryns seems to have been for a time, is established by the discovery of burnt material of the same date over a considerable area—of the burnt stratum of the Granary beside the Lion Gate,¹ of the fragments of burnt fresco from the megaron,² and from what was almost certainly the domestic quarter of the palace,³ under the later temple. Apparently the citadel was reoccupied for a short time, for pottery of the latest ('Granary') class was found above as well as below the burnt stratum in the deposit by the Granary.⁴ Pottery of this class was also found with the latest interments in two of the chamber-tombs (302 and 313),⁵ which interments may therefore be later than the sack of the city. Not only at Mycenae but at a number of other sites Granary ware appears as the pottery of the sub-Mycenaean period, accompanied by certain new features which are not found at Mycenae at all.

The earliest of these is on Salamis, where a cemetery of over 100 graves was excavated in 1893. The graves were small stone-lined cists of the old MH type, arranged in three parallel rows and each containing a single

¹ *BSA*, xxv, p. 48.

² *Ibid.*, p. 214.

³ *Ibid.*, p. 231.

⁴ *Ibid.*, pp. 29-30.

⁵ *ChT.*, pp. 6 and 55.

skeleton in a contracted posture. The offerings as in the MH period were of the most meagre description, consisting in general of one or more poor vases of the Granary class; a few, however, contained pins and fibulae of a type later than the safety-pin shape of LH III. Unfortunately the finds of the various graves were not kept apart, and when they were studied scientifically for the first time by Wide¹ it was impossible to say over how many tombs the articles in question had been distributed. There were four fibulae of moderate size ($1\frac{3}{4}$ – $2\frac{1}{4}$ in. in length) and fragments of two others described as larger. They are of a new, roughly semicircular shape which would take a number of folds of a soft material, bunched up and thus secured. Since no such fibulae occurred at Mycenae (except a stray specimen found somewhere on the acropolis with no associated material and certainly post-Mycenaean²), and since Salamis yielded no safety-pin fibulae and no close style pottery, the entire cemetery seems to have been sub-Mycenaean and to have outlasted the reoccupation period at Mycenae. Five straight pins of bronze were also found; these are not unknown in the Mycenaean age, but they are rarely of metal. Since the total number of pins and fibulae found at Salamis is so small, it is reasonable to infer that they belong to the latest graves there. It looks therefore as if towards the end of the sub-Mycenaean period a new form of dress was making its way, whether among men or women we have so far found nothing to show, for the fastening of which they were indispensable.

Yet another change appears, a presage of the succeeding period—two graves, doubtless among the latest in the cemetery, contained, not skeletons, but each a cremation urn.

The tale of the sub-Mycenaean age is next taken up by the Kerameikos cemetery at Athens,³ which starts a little later than that of Salamis but, unlike it, goes on continuously for centuries, passing from sub-Mycenaean (with which Salamis comes to an end) to proto-Geometric, pure Geometric, and then to proto-Attic, after which it ceases to be of special interest to the student of Homeric archaeology. Doubtless it goes back to Mycenaean times and farther, but the older part has not so far been discovered, apart, that is, from the two fine LH III tombs in the neighbourhood of the Areopagus recently excavated by the Americans. In the Kerameikos we have again trench graves with interments; all contained inhumations except three, in each of which ashes were deposited in a cremation urn. Eighteen yielded straight pins of bronze and fourteen yielded fibulae, four of the latter being of those which also contained pins. Normally the straight pins were

¹ S. Wide, *AM*, xxxv (1910), pp. 17 ff. See especially figs. 10–31, p. 30.

² See Blinkenberg, *Fibulae*, xii. 1 a, p. 209, fig. 228. Despite its general resemblance to the Salamis type (op. cit. ii. 1, pp. 60 ff.) it is more closely related to an Anatolian group. Strictly speaking, it is not a fibula, for instead of a spring it has an inserted pin.

³ The sub-Mycenaean and proto-Geometric graves of the Kerameikos are published in *Kerameikos: Die Nekropolis des 12. bis 10. Jahrhunderts*, vols. i (1939) and iv (1943), by W. Kraiker and K. Kübler.

found in women's graves in pairs, one pin at each shoulder;¹ it may fairly be concluded that the dress they secured was the peplos later known as Doric. In one grave the skeleton of a girl had a bracelet on the upper arm, which must therefore have been left exposed by the dress. The pins are extremely long, the largest complete specimen measuring 18½ in.; others range from 11 to 16 in. Immense pins like these are found at the end of the Bronze Age in central Europe, and thence the Dorians must have derived them. Finger-rings, mostly of bronze, were worn by both men and women; there were also a few of iron. As iron rings have once or twice occurred in LH III contexts, these graves are not necessarily the latest in the series. It is true that Salamis yielded no iron, but in view of the extreme poverty of the graves the fact has no importance. With one remarkable exception,² there were no weapons in the Kerameikos graves, and no imported articles. One hair spiral of gold and one minute piece of wrought ivory were found, both in women's graves; but both materials occur so abundantly in LH III that we may assume these articles to have been home-made, from stock already in the country, handed down perhaps in a few families.

Regarding the sub-Mycenaean period in Attica, the following conclusions may be drawn. There is throughout no evidence of any change of population. The dead were buried wearing their clothes and personal ornaments, but with no gifts other than vessels of clay, which presumably contained food and drink. Towards the end of the period the Doric peplos began to be adopted by women, spreading by imitation, not by conquest or invasion, and bearing out the statement of Herodotus about the wide range of Doric dress in early Greece. Another change, the substitution of cremation for inhumation, appears slightly later, and there is no reason to associate it with the Dorians. Though it is improbable that the intercourse of mainland Greece with the islands of the Aegaeon including Crete was ever wholly suspended, there is no evidence for direct foreign trade of any kind.

The excavators of the Kerameikos reckon that the transition from sub-Mycenaean to the succeeding (proto-Geometric) stage was complete by the beginning of the eleventh century. Here again there is a steady continuous development with no evidence for any change in the population. The pottery is gradually transformed. Mycenaean shapes like the stirrup-vase and others which imitate metallic forms gradually disappear; the vessels become sturdier and more rustic in appearance, but they are most competently made, and the alterations in decoration are gradual.

¹ In three graves (nos. 15, 46, and 47) which contained each a pair of shoulder-pins in position the skeletal remains were sufficient to prove the occupants to be women, and there is no reasonable doubt that all the wearers of shoulder-pins were female.

² *v. infra*, p. 267, for a sub-Mycenaean sword of iron.

There is one signal change. Cremation becomes all but universal; out of the forty-eight graves available as evidence only five contained inhumations. Weapons are sometimes found with the cremation urn; daggers and swords are from the first of iron. With the proto-Geometric period, therefore, the Iron Age begins. Fibulae of both bronze and iron occur in a few graves of men and women alike; straight pins continue. There are no other personal ornaments, save three gold hair-spirals, beads of clay from a few graves, and from one—a woman's—finger-rings of bronze. A few terra-cotta figurines, human and animal, and figures of horses painted in silhouette on some of the vases reveal the origins of Geometric art.

Simple as the proto-Geometric culture is, it marks a period, not of decline, but of renaissance. The comparative frequency of iron testifies to overseas commerce, though not necessarily direct trade with the ultimate source of supply, nor yet to the existence of Greek merchant shipping. Some amount of bronze must also have been imported, and for this the natural source is Cyprus. Cyprus seems to have maintained intercourse with Crete even in the Dark Age, for a Cypriot tripod of bronze was found at Vrokastro in a chamber-tomb which contained cremations, proto-Geometric pottery, and iron implements and weapons. Cyprus would be the natural intermediary for the Aegaeon in the export of iron from the mines in the Syrian mountains, perhaps also those in the eastern end of the Anatolian peninsula, and Crete an equally natural intermediary between Cyprus and the Greek mainland. The swords of the Kerameikos are in all probability imports, but apart from them there are no manufactured articles of foreign origin. At Vrokastro, where the custom of grave-goods was maintained, there was (apart from the Cypriot tripod) nothing foreign except a very small number of fake scarabs and beads of faience whose place of origin is unknown. The proto-Geometric site of Assarlik tells the same tale; apart from the bronze and iron of the fibulae and weapons and a minute amount of gold, there is nothing of foreign origin. The Greek world was virtually severed from contact with the East. The same conditions prevail throughout the first part of the Geometric age; but in the course of the eighth century, according to the evidence at present available, seclusion becomes less complete.

The practice of cremation continues for a period estimated at about a century, i.e. till the end of the proto-Geometric age, c. 950, and continues to be the rule throughout Early Geometric; in *reifgeometrisch* (2nd half of the ninth century) inhumation re-emerges, but only in the eighth century does it become predominant. Of the nineteen graves of the Late Geometric period described long ago by Brückner and Pernice only two contained cremations and in one of these the cremation urn was intrusive and not necessarily of Geometric date.¹ Though cremation revived in the seventh

¹ For the Early Geometric graves near the Areopagus which contained cremations see

century, it never again became universal. It is thus in the proto-Geometric graves of the Kerameikos and the first of the Early Geometric period, and at present in them alone, that we find reflected a culture in which that tradition of heroic poetry on which epic poetry was later to draw could have taken shape. It does not follow that Attica was the sole, or even the chief, home of heroic poetry, though it is likely enough that she was the latter.

That unitary quality which is so remarkable in Late Mycenaean culture is also characteristic of proto-Geometric, though the area over which it is known to prevail is much smaller. In Crete and at Assarlik in Caria we find besides proto-Geometric pottery fibulae and iron associated with cremation (mixed with inhumation in the case of Crete) and with the practice of burying a dead warrior's weapons with him.¹ It is true that while the material elements of proto-Geometric culture are found in Thessaly, they are not there associated with cremation, and similarly in a grave of the same period on the island of Skyros,² though the equipment of the dead warrior was buried with him, the rite was inhumation. From Boeotia there is at present no evidence at all.

There is no reason to doubt the ancient tradition which assigned to Attica a major share in the colonization of Ionia, or that the emigrants carried the practice of cremation with them to Ionia. The Geometric cemetery excavated at Colophon contained cremations only.

The chronology of the Geometric period is extremely obscure; it may be hoped that the publication of the Geometric graves of the Kerameikos will do much to clarify it so far as relative dating is concerned. The most notable recent contribution to the solution of the problem is Mr. Rodney S. Young's article entitled 'Late Geometric Graves and a Seventh Century Well in the Agora',³ in which he argues for a considerable lowering of the current dating of Late Geometric pottery. The apogee of the style he fixes at c. 725, expressly ascribing this date to the great grave amphora with a prothesis scene reproduced in pl. i of Pfuhl's *Malerei und Zeichnung der Griechen*, vol. iii, and its dissolution at c. 700, though sub-Geometric pottery continues to be produced, concurrently with proto-Attic, till 650 or even later. Some of Mr. Young's conclusions cannot be questioned and are of great importance. The alleged tomb-group in the museum of Toronto⁴ is shown to be a figment; the vases, indeed, are homogeneous and are dated by Mr. Young to the early eighth century, but the accompanying loom-weight is shown to be a product of the late sixth or of the fifth century. It can therefore be nothing but a dealer's addition and invalidates the integrity of the group; neither the bronze fibula nor the

AM, xxi (1896), p. 106, and xxii (1897), p. 478; for the later xviii (1893), p. 132. Cf. *Kerameikos*, i, p. 7, n. 5, and P. Kahane, *AJA.*, 1940, p. 465.

¹ Crete, *Vrokastro*; Assarlik, *JHS.*, viii, pp. 64 ff.

² *AJA.*, 1936, p. 228.

³ Published as *Hesperia*, Supplement II, 1939.

⁴ *JHS.*, li (1931), pp. 164 ff., and pl. vi; cf. Young, *op. cit.*, pp. 104-5.

pair of pins alleged to belong to it can be dated by the pottery. Further, Mr. Young has definitely disposed of the early date, hitherto accepted in many quarters, for the Isis grave at Eleusis,¹ which no one is now likely to date above 750, if so early; yet it may be questioned if Mr. Young is right in bringing it as low as 700. Again, if the appearance of the prothesis amphora is dated as late as 725, how are we to fill the dark and silent vacancy above it reaching back to the end, whenever that may be, of proto-Geometric? Does at least half a century, possibly more, separate it from the Toronto vases early in the eighth century and only a quarter from the birth of proto-Attic? The difficulty of filling the Geometric age with an appropriate pottery series, even supposing it to begin as late as 900, is already great; why must so much of it be compressed into the last twenty-five years of the eighth century? Undoubtedly the rate of change accelerates in the second half, but what is the ground for dating the great funerary vases so low? Since the synchronisms provided by the proto-Corinthian pottery from the Agora well all fall in the seventh century, Mr. Young has no evidence of this sort to produce; his opinion appears to rest on the fact that in this group traces of Oriental influence begin to show themselves, and are followed by Oriental imports, such as gold and ivory. This presupposes intercourse by sea; but before 725 Athens, according to Mr. Young, had no ships, for only on Late Geometric ware are ships represented. By parity of reasoning the horse and chariot, first introduced into Greece from the other side of the Aegean at the beginning of the Late Bronze Age and making their first appearance in Geometric art somewhat earlier than the ship, must have died out and been reintroduced from the east—by ship. What of the deer? what of man himself? Both appear only a little earlier than the chariot in Geometric art. Obviously this argument proves too much. Corinth made contact with Thera and so with Oriental influences c. 750;² we know that she had ships (though she did not represent them on her vases) because she founded colonies in the west from 734 onwards, whereas Athens did not. Athens, however, had contributed largely to the colonization of Ionia at an earlier date and must have known her way about the Aegean; admittedly she did not export much of her Geometric pottery, though it has been found in fair quantity on Delos and Thera (at the end of a much easier run than was open to Corinth) as well as Crete and Cyprus.³ In favourable circumstances the voyage to Cyprus and back was an easy one. Apart from the assumed lack of a ship to carry it, there is no reason why Cesnola's great funerary amphora from Curium⁴ should not have found its way there about the middle of the eighth century.

¹ *Eph. Arch.*, 1898, pp. 70 ff., and pl. vi; *CVA. Athens*, i, p. 4, pls. 3-6. Cf. Young, *op. cit.*, App. II, pp. 234-6.

² Payne, *NC.*, p. 5.

³ *MuZ.*, vol. i, p. 72.

⁴ Cesnola, *Cyprus*, pl. xxix; *P. and C.* iii, p. 703, fig. 514.

It is obvious that at this stage criticism of Mr. Young's chronology must be tentative, if only because he has disposed of a scheme which had indeed been assailed, but which retained enough credit to be a source of confusion. Yet it would be foolish to ignore the difficulties which Mr. Young's system creates or intensifies; provisionally it seems safer to carry back the Isis grave and its contemporaries, such as the late graves (3 and 4) at Spata,¹ to c. 725, this date applying, as does Mr. Young's 700, to the deposition, and therefore only to the latest articles it contains. In the case of the Isis grave these are a small number of the vases which may have been made for the occasion. The date of the scarabs and the figure of Isis cannot be determined, but is probably somewhat earlier. The gold ornaments (ear-ring in the Isis grave, a like one from the contemporary Grave *a* at Eleusis, and a necklace with similar pattern from Grave 3 at Spata) had presumably been in the possession of their owners for some, perhaps a considerable, time before their deaths. If they were elderly or even middle-aged when they died, their jewellery might go back to the decade 750-740. The ivory plaque-brooch from the Isis grave is probably as early as any article of ivory so far found in Attica; the proposed date—somewhat above 725—would agree with that of the Spartan carved ivories, which begin concurrently with Geometric and the earliest type of proto-Corinthian pottery. It is improbable that the series of gold bands from Geometric tombs in Attica begins as early as c. 800, the date proposed by Kunze;² yet it is to be noted that a number have typical Geometric decoration and nothing else. If Poulsen's contention is correct that they were not made to serve as headbands, but formed the decoration of boxes from which they were stripped,³ their life above ground may have been of some duration. In any case there seems to be no reason why the type with Geometric ornament only should not begin above rather than below 750. Provisionally the date of the great prothesis vases with figure-painting of the earliest type may be put appreciably earlier than 750, vases with Oriental motives rather after that date.

Further discussion of the importation of foreign materials in the eighth century must be reserved for the next chapter.

THE MYCENÆAN EMPIRE AND THE CATALOGUE

The Bronze Age of Greece is at present unilluminated by any contemporary native record. It is true that one Egyptian and several Hittite inscriptions of the fourteenth and thirteenth centuries are now fairly generally accepted as referring to the Achæians; they belong, however, to the period of the widest expansion of the Mycenaean power, and it is at present

¹ *Deltion*, vi (1926-7), pp. 136 ff.

² *KBR.*, Anh. I, p. 265.

³ *Die Dipylongräber und die Dipylonvasen*, pp. 38-9 and 129-30.

impossible to say to which particular group of Achaeans they apply. Cyprus and Rhodes, perhaps Achaian settlements in Anatolia, come under consideration, as well as the headquarters of empire in the Peloponnese.

There is, however, one literary document which, though both fragmentary and disfigured by interpolations, is substantially a relic of the Bronze Age. This is the *Catalogue of the Greek Ships*, which, as Sir John Myres and Mr. T. W. Allen have shown, accords remarkably well with the distribution of Mycenaean sites in Mainland Greece.¹ To assign an origin in the Bronze Age to so much of the Catalogue as is original involves two assumptions: (1) that its metrical form also goes back to that date, since otherwise it could not have been transmitted through the Dark Age; (2) that the armed force of the Achaian empire was estimated in terms of ships. This seems natural enough in an empire whose communications could only be maintained by sea and in which the ship of war was identical with the troop transport, the number of ships available thus determining the size of an expeditionary force. Since Agamemnon, or rather his predecessors, ruled over Argos (Greece? Peloponnese?) and many islands,² sea power must have been of supreme importance to the lord of Mycenae. By Agamemnon's day matters, according to the Catalogue, had changed; the kingdom under his immediate rule contained no islands and he was cut off from the Aegean, a curious fact for which an explanation has been suggested above. The inconsistency, however, extends farther; there are very few islands in the Catalogue, and, with the exception of Crete, such as there are may almost be said to adhere to the coast of Greece.

The hypothesis of a Bronze Age date for the Catalogue may be strengthened by negative arguments; at what later date could it possibly have been composed? Not in the sub-Mycenaean and proto-Geometric age, when Greece was isolated from the outer world as at no other point in her history, and when the Achaian aristocracy, who alone could have any interest in recording their vanished greatness, were dispersed or submerged. On the other hand, this is an admirable period for the disappearance from the Catalogue of all the overseas domains of the Achaian empire, whose very names probably dropped out of use. Whether Achaian settlements in Anatolia were ever included in it we have no means of knowing, but Samos and Melos, where LH III remains have been found in abundance, must surely have figured in a list of the 'many islands'. Crete retains her place, fittingly, since, as we have seen, her intercourse with the mainland was never wholly interrupted and her name cannot therefore have faded from memory; moreover, the Cretans who shared substantially in the colonization of at least the southern part of Ionia may well have carried their epic tradition with them. Unlike the famous description of Crete in the *Odyssey*,³

¹ Cf. M. Nilsson, *History of Greek Religion*, p. 42: 'The great cycles of myths, then, belong to the main centres of Mycenaean culture.'

² *B* 108.

³ *τ* 172 ff.

the entry in the *Catalogue* contains nothing which suggests interpolation. Idomeneus and Meriones play considerable, if secondary, parts in the narrative. Moreover, the Crete mirrored in the *Catalogue*'s selection from her hundred towns is the Crete of the Achaian occupation in LH III. All seven are situated in central Crete,¹ the region which contains the road that links the ports of her northern and southern coasts. That it was occupied by the Achaians is plain from the lines in the *Odyssey*² ἐν μὲν Ἀχαιοὶ ἐν δ' Ἑτεόκρητες μεγαλήτορες ἐν δὲ Κόδωνες (τ 175-6) which give the main division into centre, east, and west. They are not necessarily interpolated, as 177 certainly is, but even if they are, their evidence is none the worse for that.

With Rhodes and the samples of the Dodecanese the case is different. The threefold division of Rhodes and the Heraklid descent of all the heroes concerned betray the hand of the Dorian interpolator and the entries are not related to the narrative. Tlepolemos, it is true, figures in *E*, where he is slain by Sarpedon, but this solitary appearance is almost certainly due to interpolation, probably by the same hand; the grievous wound which he inflicts on the Lykian is ignored when the latter is found in the front line four days later (*M* 101).³ The heroes of the Dodecanese never reappear at all. The interpolator, however, may have substituted his entry for a genuine Achaian one of the Bronze Age. We have seen that Rhodes was an important seat of Achaian power; it was densely occupied, as the remains from Ialysos show, familiar, some of them, for two generations and now supported by fresh material from Ialysos and contributions from Lindos, Kameiros, and elsewhere.⁴ The citadel of Ialysos was still known as Achaia in the historic period and certain dialectical peculiarities attach the Doria of Rhodes to the pre-Doric Greek of the Peloponnese.⁵ LH III pottery from Cos, Karpethos, and Kalymna (ἀ Καλυδῶνα in local inscriptions) can be seen in the British Museum,⁶ and excavation would doubtless reveal it throughout the Dodecanese. Sarpedon is well selected to be the opponent of the Rhodian, for we may assume that the Achaians of

¹ The identification of Lykastos with Kanli Kasteli on the road from Knossos to her port on the south coast is generally accepted. It would be interesting to know who changed to Lykto or Lytto the name of a place which must originally have been called Karnessos (*P. of M.* II, p. 74, and i, pp. 10-11). The Achaians are quite as likely as the Dorians to have been responsible.

² Other indications of Achaian occupation (i.e. of settlement from the Peloponnese) in the central region are the existence of a town Arkadia or Arkades in the very heart of the district (Steph. Byz., s.v.), the existence of a sanctuary called the Amiklaion and, apparently, of a deme of Amiklaioi in the town of Gortyn, and of certain dialect forms common to Arcadian (i for ē) or to Arcadian and other Peloponnesian dialects (eabē for μῆνᾱ). Bechtel, *Dialektischer*, II, pp. 705 and 766-7.

³ Moreover, the long genealogical disquisition, besides being quite out of scale, is a departure from the normal form of entry, which ends with a hexameter beginning with τῷ δ' ἄμα or τοῖς δ' ἄμα and giving the number of ships in the contingent.

⁴ *Cat. VBM.* I, i, pp. 139 ff.; *Annuaire*, vi, pp. 83 ff. Blinkenberg, *Londres; Fouilles de l'Acropole*; *Clara Rhodes*, vi, pp. 133 ff.

⁵ Bechtel, *Gr. Dial.* II, pp. 636, 639, 649.

⁶ *Cat. VBM.* I, i, pp. 177 and 189.

Rhodes, like other members of their race, had ambitions on the Anatolian mainland and had met the inhabitants of Lykia in battle.

Note

In an article entitled 'The Colonization of Cyprus in Greek Legend' (*Opuscula Archaeologica*, iii, pp. 107 ff.) Professor Gjerstad maintains the view put forward in his earlier work, *Prehistoric Studies on Cyprus*, that the Greek colonization of the island took place not in the fourteenth century but near the end of the Bronze Age. Even at that date (1926) it seemed to many, perhaps most, that the balance of probability was on the other side. In the fourteenth century Mycenae was in an expansive phase. Rhodes was occupied and a great settlement planted in Ugarit at the time when large deposits of Mycenaean pottery begin to appear in Cypriot tombs. These include not only vases which agree in every particular with mainland products, some or all of which may well have been imported from Greece, but others whose fabric is as distinctively Mycenaean, but which present other features, highly individual and suggesting local manufacture. Since the view that they were so produced is upheld by no less an expert than Furumark (*Opuscula Archaeologica*, iii, p. 262), it may rank as orthodox. It is true that he regards the penetration as commercial only, and since the Mycenaeans of Ugarit and Tell-el-Amarna were content to live under alien authority, it may be so; but the pervasiveness of Mycenaean culture in Cyprus suggests, though admittedly it does not prove, political predominance as well.

Only a few points arising out of the ceramic evidence can be raised here. At least two vase-shapes of Mycenaean fabric frequent in Cyprus—the lentoid flask or pilgrim bottle of Near Eastern associations and the three-handled jar (*Cat. VBM.* i. ii, C 561-6, pl. iii; C 429-78, pl. iii) are alien to Greece and go back to Minoan prototypes, in the case of the latter as far back as Middle Minoan. Both occur in Rhodes, a half-way house between mainland Greece and Ugarit, the pilgrim bottle in considerably modified forms (*ibid.* i. i, A 822-38, pls. x, xi, xii, and A 884-5 and 886-9). The chariot vases have to all appearance some funerary significance strange to Greece but, as the chariots on the Hagia Triadha sarcophagus testify, familiar in Crete. These types can hardly have been produced in the Peloponnese, but Cyprus is in a different position. Here the knowledge gained since 1926 comes into play; we know that in the fifteenth century Ugarit, which was by that date a Semitic city, contained a Minoan colony which early in the fourteenth century was superseded by one definitely Mycenaean though considerably Cretanized, notably in its burial arrangements. That at this moment of her greatest commercial expansion Mycenae should plant in Cyprus large mercantile communities to exploit the copper mines and control the exportation of the ore to Ugarit is only what might be expected. Probably these bodies were either, as at Ugarit, somewhat Cretanized before their entry, or they may have included elements from Crete.

To these conclusions Professor Gjerstad opposes the view that all pottery of Mycenaean fabric in Cyprus was imported from the Argolid, those of exotic appearance being produced to meet a Cypriot demand, and that there was no entry of a Greek population until near the end of the Bronze Age. Colonists thereafter arrived in two waves, the first c. 1300 or in the immediately ensuing

years, accompanied by 'Debased Levanto-Helladic' pottery whose amount, however, is insignificant compared with the deposits of the fourteenth century. They came from Anatolia under Achaian leadership and were a mixed multitude which must, however, have included Levanto-Helladic elements; the movement was associated with the great 'Land and Sea Raid' which was met and checked by Ramses III. After about a century a second wave followed whose migration was connected with the pressure of the Dorian invasion, but whose own point of departure was mainly Rhodes and the Dodecanese. Neither occasion seems favourable for the establishment in Cyprus of the Greek language, and that in a remarkably pure form, if we may judge by the close correspondence of the Arcadian and Cypriot dialects in the classic age. No theory can be satisfactory which does not take account of this phenomenon. Though the point is not to be pressed, the persistence of Greek in more or less the form in which it must have been spoken by the Achaians of the Argolid before the Dorian invasion is more easily explicable if at some time it was the official language of the island, and the only period in which it can have held that position is the fourteenth century.

The Greek legend which Professor Gjerstad invokes does little or nothing to support his contentions; in fact the term 'legend', which implies an element of popular tradition, is misleading, for what we have is fabrication which can only have begun when Cyprus after a long period of isolation was once more in touch with the Aegean, i.e. not earlier than the eighth century, and probably in its second half. It is the work first, presumably, of the Catalogue school of poetry seeking to systematize with more of invention than tradition the history of the heroic age, and secondly of the logographers, with an admixture in certain cases of Athenian political propaganda, as Professor Gjerstad shows. He does not minimize the difficulty of sifting the wheat from the chaff, but surely the amount of wheat is greatly over-estimated. The existence in Cyprus of Peloponnesian place-names is a solid fact which testifies to the colonization of the island from that region of Greece, at any rate in the main, but tells us nothing of the date. Probably in the places in question there was a genuine tradition of their origin, but this has not survived. Lakedaimon is known to us only by a cursory mention s.v. in Stephanus of Byzantium who is doubtless the authority used by Eustathius; Keruneia, a place whose existence is frequently attested from 315 B.C. onwards (Diod. Sic. xix. 39. 1; cf. 70. 4) and which must always have had some importance as a harbour, has no oikist or legendary history, and if more appears to be known about Asine (which also lacks an oikist), that is probably because something was known or believed to be known of the history of its homonym in the Argolid with which that of Cypriot Asine had to be linked. Once we come to oikists, we are in the realm of pure fiction. It is possible, even probable, that the Teukrians were a tribe of the Troad, but Teukros as the founder of Salamis does not embody a 'tradition' of Anatolian immigration under Achaian leadership in the twelfth century. There was nothing to connect him with Cypriot Salamis until Aias was attached to the Greek island, and that connexion is first recorded in a solitary mention in the *Iliad* (H 199), i.e. in the eighth century, for the context has no claim whatever to embody an ancient tradition, a point to which Professor Gjerstad himself calls attention. The appearance of Aias in the *Catalogue* as ruler of Salamis does not inspire confidence.

Lycophron in the *Alexandra* (586 ff.) brings Praxandros and Kepheus to Cyprus, leading, the one a band of Laconians, the other of Achaïans in the later sense, from the strip of land south of the Corinthian Gulf; he calls attention to the fact that neither appears in the *Catalogue*. Here, surely, should be the founders of Lakedaimon and Keruneia, but genuine local tradition at the date when the fiction was concocted, possibly in the seventh century, may have been too strong; Lycophron ascribes no foundation to either of the pair.

Pheidippos of Cos and his brother Antiphos appear in the *Catalogue*, but only by interpolation; betrayed by their Heraklid ancestry, they fall under the same condemnation as Tlepolemos, for whom see p. 47 *supra*. A story from Tzetzes (Schol. Lyc. 911) which also appears in the Epitome of the *Bibliotheca* of Apollodorus (vi. 15) makes Antiphos occupy and name Thessaly and Pheidippos make his way to Cyprus and settle there. This can hardly be regarded as evidence of the movement of a pre-Dorian people from the Dodecanese to Cyprus.

With an Arcadian settlement in Cyprus, encumbered though it be with an oïkist, we are on somewhat firmer ground. First we have the statement of Herodotus (vii. 90) that there was such a settlement in the island, though, tantalizingly, he does not specify the locality. He had a good chance of learning genuine local tradition, for he would surely visit the island in the course of his tour in the Near East; even if he did not, he must have met Cypriots in Phoenicia. His information that Curium was the scene of an Argive settlement appears to be good; it is at least supported by the inscription found there which records a dedication to Perseutas, generally identified with the Argolid hero Perseus (Hoffmann, *Gr.D.* i, p. 62, no. 120). At Tegea Pausanias saw a temple dedicated to Paphian Aphrodite; no one will deny that this proves that at an unknown date a special connexion existed between Paphos and Tegea. Further, at Tegea and, so far as is known at the moment, at Tegea alone of Arcadian sites Mycenaean remains have been discovered in considerable quantity. A number of sherds was found in the immediate neighbourhood of the site of the temple of Athena Alea and of the temple altar, testifying to a continuous tradition of the sanctity of the site. This points to a connexion of Tegea with the Argolid in the Late Bronze Age in which the rest of Arcadia did not share, a connexion which receives some support from an inscription found at Tegea recording a festival called *Ἐκατόμβη*. A festival of the same name (spelt *Ἐκατόμβη*) is recorded at Argos (Bechtel, *Gr.D.* i, p. 395). Both were presumably in honour of Zeus Hekatombeios. It would therefore be natural for Tegeates of the Late Bronze Age to share in an emigration from the Argolid to Cyprus.

So far we are on reasonably solid ground, but there is nothing to fix the date of the emigration. What of the temple of Paphian Aphrodite at Tegea? This brings us to Agapenor, whose name as that of a king at Tegea in the Bronze Age there is no particular reason to doubt; but that no genuine tradition of Arcadian prehistory was preserved is shown by the fact that Pausanias (viii. 5. 1) was presented with two inconsistent versions. Agapenor's appearance in the *Catalogue* is as spurious as that of Pheidippos; he is not mentioned in the *Iliad*, and the Arcadians appear once only, not as a contingent in the Greek army before Troy, but in the reminiscences of Nestor (*H* 134), which afford at best but dubious credentials. There is no reason to regard him as the oïkist of Paphos.

In the temple of Athena Alea at Tegea Pausanias saw a votive peplos, presumably of ancient appearance, stated in an accompanying epigram to have been sent by Laodike from Cyprus to her own Athena. Pausanias adds that she was *γεγονυῖα ἀπὸ Ἀγαπήνορος*, and Professor Gjerstad translates this 'daughter of Agapenor'. *γεγονέαι ἀπὸ* can of course be used to mean 'child of', but only if the fact of parentage is well known or made clear by the context. As neither is the case here, the words must mean 'a descendant of', and so Frazer takes them. Pausanias says that the epigram revealed the *γένος* of Laodike, but nothing is said of her parentage or descent. All that is answered is the stock question *ποδανός (-ῆ) τὸ γένος*; The pedigree was the addition of the temple authorities, and so was the tale that she founded the temple of Paphian Aphrodite at Tegea. Professor Gjerstad's hypothesis obliges him to regard the epigram as a pure fake, invented to raise an ancient offering to heroic status. If this were so, and if Laodike was a figure known in tradition as a daughter of the royal house in the Bronze Age, the epigram would surely have made the matter clear. It may well be genuine; such an offering is probable enough in the seventh century when there was doubtless a demand in Greece for the elaborate textiles and embroideries of the Near East; they are generally supposed to have been one of the media through which Oriental motives found their way into Greek art, especially that of the vase-painter, in the Early Orientalizing period. If genuine, the epigram proves that at an unknown date a woman in Cyprus felt the Athena of Tegea to be 'her' goddess; if not, there is no evidence that the peplos came from Cyprus.¹

The site of the temple of Paphian Aphrodite at Tegea has not been located. Despite its learning, Professor Gjerstad's paper does not seem to me to strengthen the case for deferring the entry of the Greeks into Cyprus to the end of the Bronze Age.

¹ Athenaeus, indeed (48B), mentions a pair of Cypriots, father and son, Akesas and Helikon, as pre-eminent in the art of figure-weaving (*ἡ τὰν ποικίλων ἔκφ)*; a specimen of Helikon's art was to be seen at Delphi, accompanied by an epigram. Unfortunately he cannot be dated, but he cannot have flourished later than the fourth century.

CHAPTER II

THE FOREIGN RELATIONS OF GREECE IN THE LATE BRONZE AND THE EARLY IRON AGE

WHEN in the eighth century Greece, fully roused from her long lethargy, began to reach out beyond the Aegaeon, exploring, trading, founding colonies, she trod for the most part an ancient track. The first Hellenic adventurers, when they found their way to south Italy, to Sicily, and to Egypt, when they founded a settlement on the Syrian coast and traded with Phoenician ports, were only doing what those distributors of Mycenaean pottery who included at least a large element of Achaeans had done before them. When therefore Homer makes statements about these regions, the question arises whether he is importing into his story matter and even names which had only recently become known to the Greeks or embodying traits which had come down through the medium of heroic poetry from the Late Bronze Age. It is significant that names which we cannot identify, like that of the Laestrygones, or names otherwise known to us but outside the range of Mycenaean trade, like that of the Kimmerians,¹ hardly occur outside the fairy-tales of Odysseus. There is then a certain presumption that Homer did not admit to his sober narrative geographical or ethnic names pertaining to real people with whom his contemporaries had direct dealings unless they were already in the tradition.²

1. THE PHOENICIANS, SYRIA, AND CYPRUS

Though his picture of the Phoenicians represents in the main contemporary relations, we shall find reason to think that here and there a Bronze Age trait survives and that, most important of all, the name was already in the tradition. There is, however, some ground to be cleared before we can bring Achaeans and Mycenaeans into contact with the Near East. Of Cretan relations with Egypt all that need be said is that in the second millennium there was direct intercourse, dated, though not so precisely as we could wish, by MM II pottery found in tombs of the XIIth Dynasty at Lahun, Harageh, and Abydos.³ Other products of Minoan art were found in the French excavations of a group of tombs at Byblos.⁴ That

¹ The description of the country of the Kimmerians (A 14 ff.) would suit their settlements on the north coast of the Black Sea, whence they were expelled by the Skyths in the latter part of the eighth century. They are first heard of in Armenia in the reign of Sargon II (722-705). It is probable that in the eighth century the Black Sea was virtually unknown to the Greeks; the case for early Milesian colonization is weak.

² The Taphian name probably represents a real people who disappeared in the period of collapse which followed the Age of Bronze.

³ *P. of M.* i, pp. 266-8.

⁴ E. Pottier, 'Observations sur quelques objets trouvés dans le sarcophage de Byblos'.

Byblos was by this date inhabited by Phoenicians or proto-Phoenicians is certain. Farther north, on the site of Ras Shamra, the ancient Ugarit, half-way between Arad and the mouth of the Orontes, we have evidence of Cretan relations equally early and more prolonged and intense. Though the excavation, undertaken like that of Byblos by the French, was interrupted at a relatively early stage by the outbreak of the war, much valuable evidence has been obtained from the upper strata,¹ which belong to the Middle and Late Bronze Age. Here, at a date before the end of the third millennium, a Phoenician or proto-Phoenician settlement, presumably driven northward by the disturbed conditions then prevailing farther south, had imposed itself on the earlier population. Relations with Crete are proved by the discovery of a certain amount of MM II ware, sufficient to suggest that they had been in existence for some time.² In the succeeding centuries Cretan trade, using Ugarit as its port of entry for the diffusion of its wares farther east, so developed in importance that in the fifteenth century the Cretans resident in Ugarit formed a very considerable colony and exercised a marked influence on the culture and notably on the architecture of the town.³ At the beginning of the fourteenth century, however, this colony succumbed, presumably as an indirect result of the fall of Knossos, and was succeeded by a Mycenaean settlement, whose entry was subsequent to the first appearance of the Mycenaeans on Rhodes and roughly simultaneous with their occupation of Cyprus. It is true that in some respects the new colonists carried on the Minoan tradition of their predecessors, to such an extent indeed that M. Schaeffer considers that they must have been *crétisés* before their arrival, a condition which would be fulfilled if they included an element from the recent colony at Ialysos and perhaps some mercantile community of Mycenaeans established in Crete which left the island on the fall of Knossos. Their ultimately mainland origin is indicated by distinctively Mycenaean traits in their equipment, especially in the occurrence in great numbers of the terracotta female 'idols' so generally found on LH III sites in Greece.

Not less important is the factory of bronze slashing swords of central

Syria, III (1922), pp. 298-9 and pl. lxiv; for other objects which establish the close relations of Byblos with Egypt see Montet, *Monuments et Mémoires, Fondation Piot*, xxvii, pp. 1 ff. We may note in passing that these include a *barpe* believed to be of local workmanship which affords our earliest example of the art of inlaying metal in metal, an art which Crete was to make so peculiarly her own, though its principal extant specimens come from the Shaft-graves.

¹ The definitive publication of results has been begun by Professor Claude Schaeffer in *Mission de Ras Shamra, Tome III, Ugaritica, I*, a book at present extremely difficult of access. A convenient summary of results was published by Mr. Gaster in *Antiquity*, xiii (1939), pp. 304 ff., supplemented by an account by M. Schaeffer of the campaign destined to be for the time being the last, *ibid.*, p. 356.

² *Ugaritica*, I, p. 22; for a fragment of a MM II cup, pp. 54-5.

³ As Schaeffer points out (*op. cit.*, p. 34) it is doubtless these Cretans of Ugarit who figure as the Kefnu in the wall-paintings of various Theban tombs of the fifteenth century. The combination of a generally Minoan appearance, costume, and coiffure with Syrian objects brought by them as tribute to Egypt would thus be fully accounted for.

European type, whose date is not later than 1300, possibly earlier, about a century above the only other established date in the sword series, that of the specimen engraved with the cartouche of Sethos II.¹ The presence of moulds and incomplete as well as complete blades guarantees the manufacture as local. Hence in all probability came a sword of this type, found at Enkomi and now in the British Museum; and it is perhaps here that we should seek the origin of the Sethos sword and others of the same type found in the Delta. There can be little doubt that copper ore for swords and for much else came and had long come to Ugarit from Cyprus,² whose pottery becomes abundant at Ugarit in the course of the sixteenth century. In the fourteenth century LH III ware prevails. That a very great deal of it is Cypro-Mycenaean is not surprising, as Ugarit probably had the monopoly of the island's copper ore; but much also of the earliest class (Myc. III A)³ shows affinity with that of Rhodes. Here, therefore, in a Phoenician outpost to whose widespread international relations the library with its wealth of texts in a variety of languages bears witness we have a Mycenaean settlement maintaining the closest relations with the Aegean world. Evidence of Mycenaean trade with the rest of Phoenicia and with Palestine, though so far not very abundant, is not lacking.⁴ The Louvre possesses two fine LH III vases from Mishrifé near Homs,⁵ the site of the ancient Qatna. At Kafer-ed-Djarra, a settlement lying a few kilometres inland in the neighbourhood of Sidon, the later graves contained LH III pottery.⁶ A cave on the headland of Sarepta yielded a number of good Mycenaean vases dating to c. 1300.⁷

So long, however, as Mycenae was powerful in Ugarit, her interest in the Phoenician ports farther south was doubtless secondary and her direct contacts with them few and slight. While all alike had easy access to the caravan routes which converged on Phoenician territory from Anatolia, Mesopotamia, and Arabia, none commanded as did Ugarit the approach by way of the Orontes to the thickly settled and wealthy plain of Amk, which in turn opened the way to Mesopotamia and beyond. To this quarter the Cretans had from the first directed their trade; that the Myce-

¹ *s. infra*, chap. V, p. 265.

² That copper-mining in Cyprus goes back to this period and that the ore, only partially reduced, was exported to Ugarit for smelting, was established by Schaeffer, *Missions en Chypre*, pp. 94 ff. We now know that mining and smelting were carried on in the island in the third millennium. *JHS*, lxx (1945), p. 104.

³ *s. supra*, p. 12, n. 3.

⁴ The principal Palestinian sites are Tell Ajjul on the coast near Gaza, Tell Abu Hawam, Ain Shems, and Tell Duweir, which also yielded the only complete LH II vase at present known to have been found in Palestine. Four sherds were found at Gezer. The LH III ware is mostly Myc. III B.

⁵ Contenau, *Manuel d'Archéologie orientale*, ii, p. 380. The vases, there described as fragmentary, have since been reconstituted.

⁶ *Ibid.*, pp. 1052-3. No more detailed account is yet available.

⁷ Excavated by members of the American University of Beirut. Particulars were kindly obtained for me by Mrs. Dodge.

naeans maintained it is proved by the LH III vases found by Sir Leonard Woolley at Tall Atchana. Goods from the more southerly Phoenician ports would gravitate to Ugarit and be collected there by Mycenaean ships for their return cargo.

That Phoenician ships at any time in the Bronze Age sailed westwards there is neither evidence nor probability. The tin of Spain has been a will-o'-the-wisp leading much opinion on this matter astray, but quite apart from the lack of positive evidence connecting Phoenicia and Spain in the Bronze Age, there are much more probable sources of supply. That bronze was first introduced into the Mediterranean area from the Near East is certain. Armenia and Persia are known to yield both copper and tin in abundance, though there is at present no evidence that they were mined in the Bronze Age.¹ None the less they must be looked on as among the most probable sources for the earliest industry in bronze. Tin may have been one of the objects which the Cretans sought when they made contact with Ugarit and opened up an easterly trade route; and the demand in Ugarit itself must have been great when the town began to exploit the abundant copper of Cyprus. Another possible and nearer source has recently been brought to notice in the region (Kesrwan) adjacent to Byblos.² The two rivers of Byblos, Phaedrus and Adonis, flow through beds of copper and tin ore and probably in antiquity brought much of the latter down in the form of pebbles, gravel, or sand. This can hardly have escaped observation which would naturally lead in course of time to the discovery and working of the lodes. Unless evidence of such ancient mining can be found, the point cannot be proved, and if only alluvial ore was used, it can never be proved. None the less, the early use of this tin supply is highly probable and may furnish the reason why the Cretans established relations with Byblos so early. Whether Mycenae gave or received tin also remains obscure, but the former is the more probable alternative. The examination by Mr. O. Davies of the mound of Cirrha and the ancient mines or workings in its immediate neighbourhood³ has shown that tin was obtained here (since a trace was found in a crucible)⁴ and virtually proved that it was sought from EH days onwards and throughout the classic age. As Mr. Davies suggests, it may have been one of the sources of Mycenae's wealth; moreover, in the LH III period she may have imported further supplies from Spain, where the influence of Mycenaean art is said to be apparent in the pottery, both for her own use and for re-exportation; the bronze industry of Ugarit must have made great demands.

For the wares other than pottery which Mycenae exported we are quite

¹ A. Lucas, 'Notes on the Early History of Tin and Bronze', *J.E.A.* xiv (1928), pp. 97 ff., especially p. 108. Strabo (724) mentions Drangiana (Khorasan) as a source of tin. For a report of its abundance there in modern times see a note by O. G. S. Crawford, *Antiquity*, xii (1938), pp. 79 ff.

² G. A. Wainwright, *J.E.A.* xx (1934), pp. 29 ff.

³ *J.H.S.* xlix (1929), pp. 89 ff.

⁴ *Op. cit.*, p. 94.

without data; they must have been largely perishable. She can hardly have contributed to the corn which must always have been one of the chief necessities of Phoenicia,¹ with her restricted arable land and her relatively dense population. Oil, however, had been a staple product of Crete in her great days and had certainly been exported;² though there is no evidence for the production of oil on a large scale in Greece, Mycenae may have had some amount of trade in it and in wine. The vast numbers of stirrup-vases which she sent abroad did not go empty. Specimens of small size may have contained perfume; one such is reported from Mycenae found with the clay stopper of the spout in place. When this was removed, a strong though evanescent fragrance was perceived.³

For the return cargoes we have rather better data, though much must be left to conjecture. The main source of the wealth of Phoenicia must always have lain in the metals which reached her ports by the various caravan routes which debouched in her territory, converging on it from north, south, and east; articles of luxury would swell the sum total. It may be taken for granted that apart from small local supplies, all gold found in the eastern half of the Mediterranean area on sites of the Bronze Age is Nubian gold, brought mainly through Egypt;⁴ in the fourteenth century Mycenae may well have obtained much of what she wanted in Egypt itself. The excavators of Ugarit, however, found gold in quantities sufficient to convince them that trade in it was an important factor in the economic life of the town.⁵ Its situation supports the conclusion, for it lies at the end of a route which ran from the head of the Gulf of Akaba (on whose shores Hiram of Tyre at a later date allowed and even assisted Solomon to maintain a fleet whose main purpose was the transport of gold)⁶ via Ashdod, and thus enabled the caravans with their precious loads to keep well out of the way of a covetous Egypt.

The inhabitants of the lands which bordered on Phoenicia were exceptionally well placed for accumulating stores of metals, native and imported. Copper ore is widespread and ancient workings have been noted;⁷ doubtless this was one source of Syria's wealth, which is attested by the quantities of gold and silver captured by Thothmes III at the battle of Megiddo, by the vast tribute of gold, silver, and copper imposed on the conquered

¹ 1 Kings v. 11.

² *P. of M.* i, pp. 230, 283; iv, pp. 630-2.

³ Poulsen, *Delphi*, p. 62.

⁴ See *P. of M.* iv, p. 665.

⁵ A cup and plate of gold are especially noteworthy; see Syria, 1934, pp. 124 and 301, pl. xv, and Dussaud, *Découvertes de Ras Shamra (Ugarit) et l'Ancien Testament* (1937), pp. 36 ff.; *Ugaritica*, i, pp. 33-4; figs. 23, p. 36; 26, p. 37; and 28, p. 38. The influence of Mycenaean art on both is extremely marked. Egypt was no doubt at many periods a source of supply for Greece until superseded by Pangaion. Cf. the account in Kosmetas *Indikopleustes* of the gold trade carried on by barter. Solomon's gold trade may have tapped in east African ports the same sources as Egypt; even Rhodesia is not wholly out of the question.

⁶ 1 Kings ix. 26-8.

⁷ Thomson's *Journey, Bibliotheca Sacra*, and *Theological Review*, v (1846), p. 673, quoted by G. A. Wainwright, 'Alaëia, Alasa and Asy', *Klio*, xiv (1915), p. 2.

provinces,¹ and at a later date by the immense quantity of bronze and precious metals which David was able to loot from the region bordering on Hamath.² Ugarit doubtless obtained copper from this quarter as well as from Cyprus, though owing both to the abundance of the supply and the ease of transport by sea the island was probably her main source. The earliest literary reference to the copper of Cyprus is in the El-Amarna tablets;³ three dispatches from the king of Cyprus mention the large tribute of copper sent to Egypt. Copper-smelting must have been long practised in Ugarit; an actual copper-foundry of the late fifteenth or early fourteenth century, contemporary with the El-Amarna letters, yielded much Cypriot ware and Mycenaean of excellent quality.⁴ From Ugarit in all probability radiated the copper ingots which in the Late Bronze Age are found widely distributed over the eastern half of the Mediterranean area. The find-spots of most interest to us are the following: Crete, 25 in all, of which 19 were found forming a single store at Hagia Triadha; Cyne in Aeolis, 19 dredged up in the neighbourhood of the harbour; Aegina, 1; Mycenae, 1; neighbourhood of Girgenti, 1; Serra Ilixi in Sardinia, a considerable hoard; to which can now be added 1 from Ugarit.⁵ Both Crete and Mycenae appear to have made some use of local supplies; there are Bronze Age copper-workings at Chrysokamino in the neighbourhood of Gourniá,⁶ though no others of this date are known in Crete, and copper-slag has been found at Mycenae.⁷ No evidence of mining has been found there except a cave with pick-marked sides in the vicinity. In view of the large number of ingots found in Crete and the vast hoards of bronze articles found at Knossos together with the great number of bronze vessels from the Shaft-graves, it seems probable that in both Crete and Greece local supplies were supplementary only and that

¹ Breasted, *Ancient Records*, II, pp. 186-8, nos. 435-6 (Megiddo); nos. 760-1, 773.

² 2 Sam. viii. 8; 1 Chron. xviii. 7-11; cf. 1 Kings vii. 51.

³ Assuming that the name Alakija denotes the island. On this question F. Schachermeyr ('Zum ältesten Namen von Kypros', *Klio*, xvii (1921), pp. 230-9) seems to have answered the objections raised by Wainwright, *Klio*, op. cit., *supra*. The references for the letters are Knudtzon, *Die El-Amarna Tafeln*, nos. 34, 55, and 56. The Pharaoh addressed is either Amenophis III or Amenophis IV.

⁴ Syria, xvi (1935), p. 169.

⁵ O. Davies, 'The Copper Mines of Cyprus', *BSA*, xxx, pp. 78-9. Mr. Davies notes the curious fact that the only one of the two Cypriot specimens (from Enkomi) which has so far been analysed shows a chemical composition which differs markedly from the approximately uniform composition of the other five which have also been analysed. On the other hand, slag from the pre-Roman layer of the mines at Skouriotissa in Cyprus, where a rough preliminary smelting was done to reduce the bulk of the ore for transport, and slag from the copper foundry of Ugarit mentioned above were shown by analysis to agree so closely as to warrant the belief that the Ugarit ore had been imported from Cyprus (Schaeffer, *Missions en Chypre*, pp. 97-9). The composition of the one copper ingot found at Ugarit does not agree closely with either that of the Enkomi specimen or the common formula. The facts would be explained if Ugarit imported partly reduced ore from more than one quarter and did not necessarily re-export the copper ingots to the region from which the ore had come. The find of ingots near Cyne rather suggests that there was a Mycenaean settlement there as at Colophon and Miletus.

⁶ *BSA*, xxxv, p. 134 (Group G a) and p. 130.

⁷ *JHS*, xlix (1929), p. 99.

copper was imported in large quantities from Ugarit.¹ The fact that copper and not bronze was imported suggests a variety of sources for tin; as we have seen, Mycenae in all probability supplied herself and perhaps Crete as well. Some few objects found in Greece are definitely Syrian or imitations of Syrian originals. With one apparent exception among the faience seals (see p. 5 *infra*) none is earlier than LH III; the axe-blade with double perforation from the Vapheio tholos,² though the type is derived from Syria, is an Egyptian variation of it, which agrees with the fact that the tomb yielded other Egyptian objects. Three 'Resheph' figurines of Syro-Hittite type are known from the mainland—one of silver from Nezero in Thessaly³ and two of bronze from Mycenae and Tiryns respectively.⁴

Faience cylinder seals found at Mycenae, Prosymna, and Knossos⁵ and long suspected to be Syrian are now known from parallels at Ugarit to be Hurrite. A gem also from a chamber-tomb engraved with script symbols⁶ and a steatite gem picked up on the acropolis of Mycenae⁷ are also Oriental and probably from Ugarit. Few as these objects are, they imply some intimacy of contact.

A pendant and a few beads of lapis lazuli from Mycenae, Dendra, and Prosymna⁸ may have come from Egypt, for the stone was exacted as tribute by the Pharaohs from their Asiatic provinces and no doubt imported as well. A cylinder of Syro-Hittite type, however, found at Vari near Athens, had certainly made no such detour.⁹

To what extent there was a direct exchange of goods between Egypt and Greece we have no means of knowing; the small number of Egyptian objects found on Greek sites of the Late Bronze Age¹⁰ affords no clue. Some there must have been, but the Phoenician ports, and in this period Ugarit in particular, must have played in some degree the part assigned to Tyre by Ezekiel; i.e. they were great depots in which the goods of many nations accumulated and whence they were distributed over some part of the Mediterranean world. It is probable that a good deal of material

¹ *P. of M.* ii, pp. 623 ff.

² *Eph. Arch.*, 1889, pl. viii, 1; *P. of M.* iv, p. 419, fig. 347.

³ *JHS.* xxi (1901), p. 126, fig. 16; *P. of M.* iii, p. 477, fig. 331 a.

⁴ *Eph. Arch.*, 1891, pl. ii, 1 and 4; *P. et C.* vi, pp. 757-8, figs. 353-4; Tsountas and Manatt, p. 161, figs. 55-6; *P. of M.* iii, p. 477, fig. 331, c and d. Evans regards all three figures as of indigenous manufacture, but even if they are, the evidence of contact with Syria is equally strong.

⁵ Wace, *Chamber Tombs at Mycenae*, p. 197, fig. 26, p. 73; Blegen, *Prosymna*, pp. 280-1, fig. 596; Evans, *Prehistoric Tombs of Knossos*, p. 72, fig. 81, b. The Mycenaean example was found in a pit with LH I and LH II material and nothing later; this agrees with a period of Hurrite dominance at Ugarit.

⁶ Wace, *op. cit.*, pp. 203-4, pl. xx, 16.

⁷ *Ibid.*, pl. xx, 2.

⁸ *BSA.* xxv, pp. 54 and 372, fig. 81, g; Persson, *R. T.*, pp. 20 and 58; Blegen, *op. cit.*, p. 294. The rather commoner and more widely diffused amethyst and carnelian in all probability came from Egypt, also a few malachite beads from Prosymna.

⁹ *P. of M.* iv, p. 409, fig. 339, and cf. a kindred cylinder of lapis lazuli, found in a MM stratum at Knossos, *op. cit.* iv, pp. 423-5, figs. 340 and 350.

¹⁰ Catalogued in Pendlebury's *Aegyptiaca*.

which was native to Egypt or passed through it was ultimately sent westward from Phoenician ports. Now and again such a case is strongly indicated by a name. *βύβλος* must have been so called after the port whence it was first dispatched to Greece, and the name was never superseded by *πάπυρος*, though in the fifth century the material was imported direct from Egypt.¹

Fine linen was from time immemorial a product of Egypt and probably a regular export, but the Semitic associations of the word *chiton* suggest that though the linen was produced in Egypt, the garment reached the Greeks from Phoenician markets.² The bulk of the Nubian gold which reached Mediterranean shores in the Bronze Age certainly passed through Egyptian hands and the Greeks no doubt in this period got some, at least, of what they needed direct from Egypt. The experience of Menelaos, who on his profitable tour there collected *πολὴν βίοντον καὶ χρυσόν*,³ looks like a genuine reminiscence of the Bronze Age; there is no evidence that Greece recovered contact with Egypt before the days of Psammeticus I and by that time, or very little later, the gold-mines of Thasos were affording a nearer supply. The word *χρυσός*, however, is neither Egyptian nor Greek; it is impossible to separate it from the Phoenician and Hebrew *haruz* and the Assyrian *hurašu*.⁴ As in the case of *chiton*, the Greeks apparently owed their first familiar knowledge of name and thing to the Phoenicians. Embedded as they are in the hexameter, the first appearance of these words in Greek and indeed in Greek poetry must go back well before Homer, and, that once granted, we can hardly in the case of foreign luxuries stop until we have traversed the period of isolation and eclipse and reached the Mycenaean age.

It is not surprising that the Greeks of the mainland made their first close contacts in the Near East with the Phoenicians rather than with the Egyptians. Crete, however, was in a different position, being much more favourably placed for the run to Egypt;⁵ her ships may have made first

¹ Hermippus ap. Kock, *CAR.* i, p. 243, nr. 63, l. 13. Homer knows papyrus in the form of a *βέβλος ἄνδρος* (δ 391); it may have had a considerable market in the Late Bronze and Early Iron Age for the manufacture of sails and ship's tackle.

² Tyre imported fine linen from Egypt in the early sixth century (Ezek. xxvii. 7). *Chiton* is almost certainly connected with the Assyrian words *kīn*, flax, and *lītinu*, linen. Linen was of course produced in Greece in the Bronze Age, as the fairly numerous fragments from the Shaft-graves show, and in the epics such homely articles as sheets, shrouds, and covers for furniture are known by the names *λίνα* and *λίνα* (acc.), whose root is common to most Indo-European languages. No convincing etymology has been proposed for *ebēra* which is used thrice in the poems, always of extremely fine linen. The derivation from *ebēn*, a *βέβλος εἰρημένη* in Hebrew, which borrowed it from Egyptian, is attractive, but obviously not susceptible of proof.

³ γ 301. No other metal is mentioned.

⁴ Boisacq, *Dictionnaire étymologique de la langue grecque*.

⁵ Egyptian objects up to the days of the XXth Dynasty entered Crete by the port of Komō near Phaistos at the end of the road which runs from Knossos southwards across the island. Pendlebury, *Aegyptiaca*, pp. 3 ff., and Wainwright's review, *JHS.* lii, p. 127.

for Cyrene, revictualled and taken on water, and then been borne by the strong eastward coastal current which runs close inshore to the Delta, or, more probably, they may have struck diagonally across the open sea straight for their objective; in which case they might, as we shall see, get into a useful current. The return would be more laborious, and the ships, to escape the coastal current, must have stood farther out to sea; but they encountered no such stretch of totally waterless coast as separates Gaza from the most easterly port of the Delta. This formidable voyage, doubly formidable when made from Syria, since the current turns north with the coast, was probably left for the most part to the Phoenicians, who must have plied to and fro along the route from the day when Egypt first began to supply herself with the timber of Lebanon on which the existence of her empire depended; nowhere nearer could she find trees to make the masts of sea-going ships. Those jealous traders would certainly do their best to exclude competitors, and the Cretans, too, may have discouraged Mycenaean exploration to the south-east by withholding water-supply; Mycenae and Rhodes, however, had an alternative route. The regular course followed by sailing-vessels is, or was up to the war of 1914-18 (since when it has probably been undertaken only by motor-launches), to sail out between Rhodes and Carpathus and continue due south for a considerable distance till they reached a current with a south-easterly direction, by following which they made a perfect landfall in the Delta without using the rudder at all; a slight use of it was enough to bring them to Cyprus.¹

The run from Nauplia to Ugarit presented no special difficulties, especially if, as seems probable, the Mycenaeans had a settlement or at least a depot in Pamphylia.² 'From Syria to the Archipelago', writes Beaufort, who surveyed for the Admiralty the south coast of Asia Minor and the adjacent waters in 1811-12, 'there is a constant current to the westward, slightly felt at sea, but very perceptible along the shore.'³ It could be avoided on the outward voyage and utilized on the return. At anchor in the Gulf of Pamphylia, off Deliktash, which probably stands on the site of Phaselis, Beaufort remarked 'a small but steady light' among the hills and found it on exploration to be a volcanic flame, recorded by Ktesias and doubtless a sailing mark for the mariners of many earlier centuries.⁴

¹ I owe this information to Sir John Myres, who also informs me that on one occasion a sailing-boat in which he was making the journey from Cyprus to Alexandria took 11 days in transit as against a normal 3—a good example of the hazards to which the mariners of antiquity were exposed.

² *v. supra*, p. 32.

³ *Karamania*, p. 39. This route by the south coast of Anatolia would have been followed by the ship of Adramyttium in which St. Paul travelled but for contrary winds.

⁴ *Op. cit.*, p. 44; cf. Malten, *Herphaistos*, *Jb.* xxvii (1912), pp. 232 ff.; for Ktesias see *op. Photium*, *Bibl. Hoeschel*, p. 145; Antig. Caryst. 166, Keller. The east coast of Lykia, whose northern end abuts on the Pamphylian plain, must always have been of interest to Aegaeian seafarers to and from, but especially from, Cyprus and Syria; some point or points on it must

In the absence of excavation the only archaeological evidence in favour of a Mycenaean settlement in Pamphylia is a copper ingot of the type noted above¹ which was dredged up off Adalia (Attaleia); but the evidence for a brisk trade, direct or indirect, between Mycenae and Ugarit greatly enhances its probability. It seems likely on the whole that in LH III two diverging trade routes ran from Greece to the Near East, one to Egypt, whether by Crete, whose ports after the fall of Knossos lay open to the Mycenaeans, or by the channel between Rhodes and Carpathus, the other along the south coast of Asia Minor to Ugarit, while trade between Egypt and Ugarit was in Phoenician hands. The use of the second can hardly be doubted; it would agree with the fact that whereas LH I and II ware has been found in appreciable quantity in Egypt and LH III of the fourteenth century in very large amounts, LH I is unknown in Phoenicia and Palestine and LH II is but scantily represented, while LH III ware is, as we have seen, very moderate in amount, nor is it necessarily of mainland origin.² Now and again a Mycenaean ship might make the round trip in the order Nauplia, Egypt, Ugarit, but such would certainly not be encouraged by the Phoenicians.

The only other Oriental import³ which calls for remark is ivory which, rare in Greece in LH I and II, is found in greatly increased quantities in

have been regularly visited for water, quite apart from any question of trade. The peculiarly waterless character of much of the southern coast is noted by Beaufort, who had difficulty in getting supplies (*Karamania*, p. 9) except between the mouth of the Myra and Hieria Akra. On the barren, rocky, uninhabited island of Krambousa he found a stream of excellent water whose remote source could only lie in the mountains of the mainland. Unfortunately Strabo and Pliny in their brief notices of the islet (666 and *N.H.* v. 102) omit to tell us if it was used by ancient navigators as a watering-station. Antigonus, however (*Hist. Mirab.* 129), quotes the poet Callimachus for the statement that off the neighbouring Chebidonian islands there were many fresh-water springs in the sea—*ὅς κ' ἐν Ἀελιδονίᾳ ὄρι ἐνὶ μάκρ' ῥόσος ἔχει γλυκύναις ὕδασι*. Callimachus gave as his authority Eudoxus of Cnidus. It may well be that Phaselis with its harbour (so Skylax 100; later it had three) was the site of a Mycenaean settlement; wholly cut off by their mountain screen to the west, the inhabitants would be safe from attack by the Lykians. The volcanic flame located by Beaufort accounts for the fact that here was the cradle of the cult of Hephaistos, which spread up the west coast of Anatolia and across the Aegean at an unknown date to Attica, though not much favoured elsewhere on the mainland. In the *Iliad* the cult is evidently established in Lemnos (*A* 592-4), which according to this passage was still inhabited by Sintiians, though the fact that a son of Jason was king in the island (*H* 467) suggests that Greek colonization had begun.

¹ *BSA*, xxx, pp. 78-9.

² It is probable that the original centre of diffusion was Ugarit; some of the shapes are not found in Greece and some of those that are are also found at Tell Aichana. Two or three fragmentary Mycenaean female terra-cotta figurines from Tell Abu Hawam and Ain Shems suggest that there may have been small settlements of groups or families from Ugarit, possibly as a consequence of the Land and Sea Raid in the reign of Ramses III.

³ Whether timber of the Lebanon, most vital of all commodities for Egypt in her imperial days, was ever imported by the Mycenaeans it is naturally impossible to say. They must have maintained considerable fleets; Athens, in the same position nearly a millennium later, had to go as far afield as south Italy for her supplies. Attica, however, was peculiarly treeless; not so the Peloponnese, which may well have been even better wooded in the Bronze Age than later. None the less, the trade is not out of the question; and cedar for the fittings of palaces and great houses may well have been brought in.

LH III.¹ For the most part it was imported unwrought and converted in Greece into combs, mirror-handles, pommels for dagger-hilts, and a variety of small ornaments; some of these articles are decorated with carvings purely Mycenaean in style. Some trade was done in them, for combs have been found in Troy and Crete.² Probably most of the ivory is African and all of it may be, but the possible use of that of the Asiatic elephant as well must not be overlooked. Its presence in north Syria in the first half of the fifteenth century is attested by the elephant hunt organized for Thothis III in the plain west of Aleppo after a successful campaign had carried him to the banks of the Euphrates; 120 elephants were captured.³ Tiglath Pileser I (11th/10th century) killed ten and captured four in the country of Harran;⁴ even in the ninth century Assur-nasir-pal II killed thirty and captured some specimens for his park.⁵ Probably the creature was then near extinction in that region, for it makes no further appearance in the records. In the Bronze Age, however, it seems probable that the Syrian schools of ivory-carving, including the semi-Mycenaean branch active at Ugarit,⁶ would use the supply of Asiatic ivory at their doors. The point could probably be settled by expert inspection of individual objects.⁷

A few samples of Near Eastern carvings reached Greece, despite her evident preference for her own art; it is fairly safe to ascribe them to Ugarit, which has yielded a remarkable figurine of a goddess in the Minoan-Mycenaean style,⁸ yet with distinctive features of her own. The examples found in Greece are, first, a pair of handles, one certainly and both probably from mirrors, each carved with a pair of female figures which exhibit Minoan traits, but are certainly not Cretan.⁹ Fragments of a female figure in relief also found at Mycenae show a very close resemblance to the goddess of Ugarit;¹⁰ Professor Blegen found at Prosymna in a LH III context

¹ Considerable quantities were found in the chamber-tombs of Spata and the tholos of Menidi (*BCH.* ii (1878), pp. 135 ff.; Lolling, *Das Kuppelgrab bei Menidi*, pls. vii and viii), as well as isolated objects in chamber-tombs at Mycenae excavated by Tsountas.

² *Troja und Ilium*, p. 339, fig. 389; *BSA*, Supplementary Paper I (Palaikastro), 1923, p. 127, fig. 108; *Deltion* xi, p. 87, fig. 12.

³ Breasted, *Ancient Records*, ii. 227.

⁴ Luckenbill, *ibid.* i. 247.

⁵ *Ibid.* 320.

⁶ *Ugaritica*, i, frontispiece and pl. xi, facing p. 36; Bossert, 303.

⁷ Mr. Crowfoot informs me that a specimen of ivory not earlier than the ninth century found in Samaria was submitted to a commercial expert and pronounced by him to be African. As we have seen, however, it is probable that by this date Asiatic ivory was no longer available. Little importance can be attached to the fact that ivory is among the commodities exacted as tribute from the Phoenician cities by Shalmaneser III, for the Phoenicians imported it from Egypt; the Assyrian king was not concerned about its source.

⁸ *Ugaritica*, i, *ut supra*. The discovery at Ugarit of an unfinished cylindrical pyxis carved in the same style goes near to establish the town as the place of production. *Gazette des Beaux Arts*, 1930.

⁹ *BSA*, xxv, p. 369, pl. lix A.

¹⁰ *Eph. Arch.*, 1888, pl. viii, 1 and 2. Other figures on the same plate may belong to the same school.

an ivory statuette of a somewhat similar type, but with features pointing to a remote Cretan ancestry.¹ A very remarkable group consisting of two seated female figures with the fragmentary remains of a child standing in front of them found on the acropolis of Mycenae, unfortunately not in a datable context, may perhaps be derived at a nearer remove from the same source,² but a fine pyxis decorated with reliefs of griffins hunting deer from a LH III chamber tomb at Athens may well come from farther east.³ The well-known ivories of Enkomi (mirror-handle and draught-box) belong to the same group.

We may infer the exportation from Ugarit of purple-dyed wool inasmuch as an inscribed tablet from the site deals with the industry;⁴ moreover, crushed murex shell in quantity was found in the harbour region, where Mycenaean remains are abundant.⁵ This suggests that the industry afterwards so closely associated with the Phoenicians may possibly have been taught them by the Cretans, who were already practising it in MM days⁶ and had at least a traditional reputation for it in early historic times.⁷ From them the 'Cretanized' Mycenaeans of Ugarit may have learned it and then spread it over the Aegean. It is a remarkable fact that the refuse of a great purple factory has been found in Troy VI,⁸ a city whose upper strata yielded LH III ware in great abundance; the possibility of a Mycenaean colony in Troy as well as in Ugarit may well be borne in mind. That there was at some date a purple factory on Cythera is certain; Aristotle testifies to the fame of her purple in historical times.⁹ In recent years MM sherds of genuine Cretan fabric have been picked up, a rare occurrence on mainland Greece or its islands. It is possible therefore that the Cretans may have had a purple factory there, which would of course in no way exclude the possibility of a Phoenician one at a later date.

¹ *Prosymna*, pp. 461 ff., figs. 729-31. On the subject of the Syrian schools of ivory carving reference should be made to R. D. Barnett's valuable study in *PEQ.*, 1939, pp. 4 ff.

² *JHS.* lix (1939), p. 210, pl. xiv, b.

³ *Ibid.*, pp. 189-90, pl. xiv, a.

⁴ Published by Thureau-Dangin, *Syria*, xv (1934), pp. 137 ff. Though bought at Latakiah, the tablet undoubtedly came from Ras Shamra. It is tentatively ascribed by Thureau-Dangin to the second third of the second millennium; if this is correct, it is more likely to be contemporary with the Minoan than with the Mycenaean colony. The proper names inscribed on it, apparently those of the workmen employed, are either Semitic or show affinities with Hurrite.

⁵ *ILN.*, 1935, p. 712. The factory started in the later years of the fifteenth century and perished in a general catastrophe which overtook Ugarit in the second quarter of the fourteenth century.

⁶ *BSA.* ix, p. 276 f. It would obviously be premature to form any opinion on the subject until there has been much more excavation of sites on the Phoenician coast.

⁷ Korobios of Ithaca, whose guidance the Theraeans sought for their voyage to Libya, is described as a *πορφύρεος* (Herod. iv, 151).

⁸ *AJA.* xli (1937), p. 582. The purple-dyed textiles of Hermione were famous in the classic age, as we learn from Plutarch (*Vit. Alex.* 36), a passage which carries their fame back to the sixth century; but we learn nothing more about the manufacture. The site, cut off by mountains from the interior as effectually as by an isthmus, is one that would have suited the Phoenicians.

⁹ Ap. Steph. Byz., s.v. *Κύθηρα*, where it is stated that the island was also called Porphyryssa.

The commodities to be found in Phoenician ports from the ninth to the sixth century did not differ greatly from those available at Ugarit in the fourteenth. In 876 Assur-nasir-pal II exacted from Tyre, Sidon, and Byblos a tribute of gold, silver, lead, bronze, and brightly coloured garments, and these, as well as fine linen from Egypt, are all found in the mart of Tyre as described by Ezekiel¹ early in the sixth century. As we have seen, gold was abundant at Ugarit and copper a staple export; for the exportation of bronze, probable though it be, we have no evidence, nor yet for that of lead, a very widely distributed metal. Ugarit could certainly obtain silver from the Taurus, but Mycenae is perhaps more likely to have supplied herself from Troy,² where local sources were abundant and were worked in ancient times. The silver in 'Priam's Treasure' was probably of local origin; it greatly exceeded the gold in bulk, whereas in the Shaft-graves and the cave of Arkalochori³ gold was greatly in excess of silver. It is improbable that silver was mined at Laureion in the Bronze Age.⁴

Variegated garments were certainly to be had in Ugarit; they are worn by Semites and other Asiatics from their first appearance (in the Late Bronze Age) on Egyptian monuments and doubtless much earlier, for the Near East excelled from the most ancient days in the production of vegetable dyes. Of the importation of textiles into Greece, however, we cannot judge, for they have left no trace in Mycenaean ceramic or other styles, except perhaps on vases of the latest period.⁵

It might have been expected that the perennial exports of the East, perfumes, unguents, and incense, would find their way to Greece, and probably they did; but evidence in the shape of containers is lacking and we do not know what was burned on the portable hearths of Crete or in the small terra-cotta braziers and fire-jars of Mycenaean Rhodes.⁶

With the Bronze Age the history of Ugarit, like that of Mycenae, comes to an end. It was destroyed, probably by the land forces of the great attempted invasion of Egypt which was repelled by Ramses III in the first decade of the twelfth century, possibly by Tiglath Pileser I c. 1100. There was no revival;⁷ the situation which made Ugarit wealthy and powerful

¹ Luckenbill, *Ancient Records*, I, § 518, p. 189; Ezek. xxvii.

² *P. of M.* i, p. 193 and n. 1. The allusion in the Trojan 'Catalogue of Ships' (B 857) to Alybe beyond the Paphlagonians as the 'birth-place' of silver belongs to a later age, when the Greeks were trading along the north coast of Asia Minor.

³ *AA.*, 1935, p. 249.

⁴ O. Davies, 'The Ancient Mines of Laurium in Attica', *Mon.*, 1936, 6.

⁵ Rosettes and palmettes (which appear, e.g., *Cat. VBM.* I, i, A 931 and 932; F. and L., *MF.*, pls. xxxvii, no. 380, and xxxviii, no. 393; *BSA.* xxv, pl. vii, 2) are Oriental motifs which may well have been derived from textiles. The cable, a favourite Syro-Hittite motif, appears earlier, though at first rarely; *Cat. VBM.* I, i, pp. xlii-xliii. For an example on a Mycenaean vase found in a fourteenth-century context at Ugarit, see *ILN.*, 1937, p. 297. Variegated garments are worn by many of the figures on Cyprio-Mycenaean vases; see *Exc. in Cyprus*, p. 49, fig. 75; p. 73, figs. 126 and 127. *Annuario*, vi-vii, p. 234, fig. 150; *Syria*, xii (1931), pl. iii, 2; Bossert³, figs. 458-502.

⁶ *Cat. VBM.* I, i, A 801-11.

⁷ In the Early Iron Age there was a small settlement on the top of the tell and a cemetery in which were found iron spear-heads and a few bronze fibulae strung on a chain; *Ugaritica*,

did not recur. The disintegration of the Hittite empire and the subsequent eclipse of Egypt not only ended her strategic importance as an outpost of the latter's empire; it involved the ruin for the time being of the trade-routes on which her wealth depended.¹ Greece was involved in the general collapse; and even when after the lapse of some centuries commerce was resumed, the great lines of trade running north and south between Egypt and Asia, east and west between Greece and Asia, no longer intersected at Ugarit. Mycenaean trade had been on the decline for some considerable time before the final collapse. None of the Mycenaean pottery found in Egypt can be dated later than the reign of Ramses II, and the latest stages of Mycenae are marked by impoverishment and by the absence of ivory and other foreign goods. Yet it is unlikely that intercourse with the East ever wholly ceased. In Palestine fragments of proto-Geometric ware thought to be from Thessaly have been found at Tell Abu Hawam and Askalon.² They can be dated with fair certainty to the tenth century; perhaps the wealth of Palestine under Solomon attracted occasional adventurers from afar. A vase from a proto-Geometric cist-grave at Theotoku has an 'ex-crescent' cup on the shoulder, which points to Cyprus or the Levant;³ the moderate amount of iron which accompanied it, and also the iron from the tholos tombs of Marmariæ, may well have come by the same route.

Whereas in Greece the twelfth century marked the decline and the eleventh the collapse and total disappearance of the Mycenaean culture, inaugurating a period of impoverishment in material civilization, in the Levant the fall first of the Hittite and then of the Egyptian empire, together with the withdrawal of Assyria after the brief successes of Tiglath Pileser I, opened the way for Phoenician enterprise. By the eclipse of Egypt her trade with the south must have profited greatly. The once imperial power could now be by-passed and gold and ivory could enter freely by the Gulf of Akaba, a route the importance of which is guaranteed by the desire of Hiram of Tyre that his friend Solomon should establish a fleet on the gulf for the transport of gold.⁴ With Assyria weak and inactive

1, p. 49, figs. 37 and 38. In the harbour (Leukos Limen of the Stadiasmos; Müller, *Geog. Gr. Min.* i, p. 474, 139, 140; R. Dussaud, *Topographie historique de la Syrie antique*, Paris, 1927, p. 477) a hoard of Greek silver staters of the sixth century was found. All were from the regions bordering on Thrace and Macedonia; *Ugaritica*, i, p. 59, fig. 39.

² For the relations between Egypt and Phoenicia near the end of the twelfth century see the often quoted story of Wenamun the Egyptian envoy, which is conveniently summarized *CAH*, ii, pp. 192 ff. Cordage and papyrus rolls, native products of Egypt, formed part of the scanty wares with which he hoped to buy timber of Lebanon.

³ *QDAP*, iv, p. 181; cf. p. 24.

⁴ Wace and Thompson, *Prehistoric Thessaly*, pp. 209 ff., fig. 146, c. It is true that at this date we cannot exclude the Black Sea route for iron coming from NE. Anatolia (v. *infra*, p. 124), nor indeed, bearing in mind the iron slag found in an early post-Mycenaean stratum at Vardamitsa, transmission by land. Cf. *BSA*, xxviii, p. 198.

⁵ v. *supra*, p. 59, and 1 Kings ix. 26-8; cf. 2 Chron. xx. 36-7, where the late author has plainly no knowledge of Tarshish. Ships built at Ezion Geber could hardly sail either by Tartessos or Tarsus.

there was nothing to hamper Phoenician trade with Cilicia and Armenia, and it was doubtless Anatolian silver that Solomon made to be as stones in Jerusalem. To this period must also belong the occupation of coastal sites on Cyprus, on whose copper and other natural resources the Phoenicians presumably continued to draw.¹ No site of Phoenician culture has been uncovered, and in the absence of early Phoenician objects we cannot date their first settlement; but presumably they ensconced themselves as soon as the collapse of the Mycenaean régime left them a free field.² The date at which they began to strike out westwards cannot be fixed, but it is improbable that it was very early. No Phoenician objects found in Spain go farther back than the eighth century; possibly they belong to the seventh.³ It is true that according to Velleius Paterculus (i. 2. 4) Gades was founded about 1100, but his source cannot be determined, and it seems unlikely that Strabo, who relied on Posidonius, would have ignored the opinion if it had had serious support. Nor is there any reason to equate the biblical Tarshish with Tartessos and suppose a 'ship of Tarshish' to be one capable of making the voyage thither from Tyre. Not one of the scanty items of information about Tarshish which we glean from the Old Testament suggests the Spanish port, and some appear to rule it out. The metals with which Ezekiel (xxvii. 12) credits Tarshish (silver, iron, tin, and lead) were all abundant in east Anatolia; it was her trade in metals that made the control of Cilicia a vital matter for the Assyrians. Meagre and enigmatic as are the indications afforded by the Old Testament,⁴ they are perfectly suitable to Tarsus, situated on the route which led from the Cilician Gates to Syria and the East, and only a few miles from the mouth of a then navigable river.

Two Phoenician inscriptions found at Nora in Sardinia and dating to the first half of the eighth century constitute the earliest evidence for the presence of Phoenicians in the west Mediterranean,⁵ but indicate a somewhat earlier date for preliminary exploration and settlement. This supports the statement of Thucydides,⁶ so far uncorroborated by archaeological evidence, that they had established depots all round the Sicilian

¹ On their occupation of sites round the entire coast of Sicily, *ἀποτοπίας ἐνέσταν τῆς παρὰ τὸς τοὺς ἑσπερίους*, see Thucydides, vi. 2. 6.

² The earliest evidence at present available is that of a Phoenician inscription on a tombstone in the Nicæia Museum, which can be safely dated as not later than the ninth century. See p. 129, n. 1 *infra*.

³ See Bosch-Gimpera, 'Fragen der Chronologie der phönizischen Kolonisation in Spanien', *Klio*, xxii (NF. iv), pp. 345 ff., esp. pp. 351 and 365.

⁴ The authorship, date, and occasion of the most extensive passage in which Tarshish figures (Isa. xxiii) are matter of dispute; but it may be noted that the other places mentioned are Tyre, Sidon, and Cyprus (Kittim). In Ezek. xxxviii. 13 Tarshish appears in the same context with Sheba and Dedan (south of Edom), and in Ps. lxxii. 10 with Sheba and Seeba, i.e. in every case she appears in company with relatively near neighbours of Phoenicia. It is of course possible that in the course of time the expression 'ship of Tarshish' lost all geographical reference and denoted simply a ship of a particular size or type; cf. 'argosy', said to be derived from Ragusa, the Dalmatian port from which the ships in question sailed.

⁵ *CIS.*, 244, 245; *Syria*, v (1924), p. 147. Dussaud's date in the late ninth century is generally regarded as too early.

⁶ Thuc. vi. 2. 6.

coast before the Greeks planted their first colonies in the island. It also accords with the evidence of the *Odyssey*, in which the west coast of Greece is within the westward limit of Phoenician activity.¹ In fact, the range of the Phoenicians' activity in the poem, their relations with the Greeks, and the Greeks' knowledge of them are exactly what we should expect to find in the eighth century—with one notable divergence. In the Bronze Age the Phoenician cities seem to have been more or less on an equal footing, but from the date of their reappearance in history Tyre takes a pre-eminent position. According to tradition Sidon was totally destroyed near the end of the Bronze Age;² excavation has proved tradition true. For a period the site was entirely deserted; it was reoccupied in the Early Iron Age.³ Probably the same fate overtook Tyre, but her recovery was earlier and more vigorous. She is the reputed foundress of all the earliest Phoenician colonies—Utica, Gades, Lixi, Carthage; it is true that their high traditional dating is probably apocryphal, but in the eighth century her name must have been at least as well known to the Greeks as that of Sidon, yet it finds no mention in Homer. The most plausible explanation is that he did not find it in the epic tradition and therefore felt bound to ignore it.

Our earliest literary evidence for the pre-eminence of Tyre in craftsmanship is given in the Old Testament narrative of the building of Solomon's temple⁴ in the second quarter of the tenth century, wherein are reflected her resources and her artistic renown. It is true that the booty bequeathed by David furnished the necessary metal, but for the works of art produced from it Solomon had to rely on a Phoenician artificer, Hiram of Tyre, who was the son of a man distinguished in the same calling and had special skill in bronze-casting on a large scale.

We have, however, no hint that Phoenicia's reputation reached to Greece at this date. Apart from the indifference which the European Greeks consistently manifested to the synthetic products of Phoenician art, they were at this time, as we have seen, in a state of virtual isolation; they probably could not afford luxuries, and their waters were not visited by Phoenician ships. Unless we accept Karo's post-Mycenaean date for two articles in the Tiryns hoard,⁵ both of which certainly were imports from the Near East, we can point to no articles of even plausibly Phoenician origin found in Greece which are earlier than the seventh century, since the date of c. 800 can no longer be accepted for the Aegina treasure. The hoard is

¹ = 271-5.

² Justin, *Hist.* xviii. 3. According to this account the Sidonians, expelled from their city by the king of Askalon, sailed southwards and founded Tyre in the year before the fall of Troy. It looks as if we have here a distorted tradition of the Land and Sea Raid repelled by Rameses III, as a result of which the coast of Palestine was occupied by the Palesati or Philistines. Probably all the Phoenician towns suffered destruction or damage at their hands.

³ Contenau, *La Civilisation phénicienne*, pp. 68-9.

⁴ 1 Kings vii. 13.

⁵ Published by Karo, *AM.* lv (1930), pp. 119 ff.; see esp. p. 138.

undoubtedly, as Karo says, the harvest of a post-Mycenaean tomb-robber and contains articles ranging in date from LH I to the end of LH III; it may be doubted, despite his great authority, whether the iron knife in question should be brought below the latter date. The whole hoard was contained in a large bronze cauldron of foreign form and unknown origin. It included a Hittite seal of haematite ascribed to a date between 1350 and 1200,¹ presumably imported before the end of LH III. One of the foreign objects which according to Karo belongs to the end of the Mycenaean age is a bronze volute tripod of the well-known Cypriot type together with the bowl belonging to it.² One, now in New York,³ which has hitherto been regarded as the earliest of the series (apart from the present example), is assigned to a date between 1250 and 1100, and its resemblance to that of the hoard is remarkably close. The birds which dangle from the bowl-ring of the latter are indeed a new feature, but we may compare one closely similar perched on the rim of a bronze mug of Ialysos type also included in the hoard.⁴ This shape, which does not appear in post-Mycenaean pottery, is common in LH III and especially in Rhodes, from which this unique example in metal may have been imported.

A tripod still finer and possibly earlier than the New York specimen may be seen in the Cyprus Museum; it has bull's feet, a bull's head projects from each leg, and from the bowl-ring, between each pair of legs, hangs a pair of rings from one of which an oval bead is suspended. It is ascribed to a date c. 1200. A somewhat similar though less elaborate example in the museum at Jerusalem has the three rings, but no suspended object. On the ground of its resemblance to the Tiryns specimen it is ascribed to the Early Iron Age, but it was in fact found in a thirteenth-century stratum, and though it may possibly have reached it by rolling down the side of the tell, there is no reason to suppose that it did so. The Tiryns tripod has dangling pomegranates or flowers as well as birds. A miniature tripod of a different type from Ugarit, dated to LH III, has a complete circlet of equally ambiguous dangling pomegranates. No doubt their presence on the Tiryns tripod indicates Phoenician influence in Cyprus, where it is to be expected.⁵

The second object, a curved iron blade whose shape is not Aegaeon and suggests the East,⁶ is much larger than any other iron object of Mycenaean date found on the mainland, where iron is almost limited to rings and parts of rings; but a solid iron bracelet found in a LH III tomb at Ialysos⁷ is

¹ Karo, *op. cit.*, no. 6214, pp. 126 and 139 f.

² *Ibid.*, Beil. xxxiii, p. 132, fig. 4; Bossert², 164; Lamb, *Gr. and R. Bronzes*, pl. xi, b.

³ Lamb, *op. cit.*, pl. x, b; cf. p. 33.

⁴ Karo, *op. cit.*, Beil. xxxiv, 1.

⁵ *Syria*, x (1929), pl. ix, 1; Bossert², 495.

⁶ Karo, *op. cit.*, p. 136, fig. 6, no. 6228, a.

⁷ *Annuario*, vi-vii, p. 127. This tomb, which also yielded a Hittite seal and an ivory comb, contained ten inhumations, as well as two cremations in separate pits. It was apparently impossible to establish any sequence in the objects buried with the inhumed corpses, but it is certain that the iron, the only example of the metal found by the Italians, the comb, and the seal belong to them and not to either of the cremations. Consequently they do not belong to the sub-Mycenaean phase of the tomb.

comparable though not equal in amount of metal, and such a knife seems precisely the kind of present which a Hittite potentate might give to an Achaian king or great noble. To compare small things with great we may recall the famous iron dagger sent by the Hittite king to Amenophis III and possibly identical with that found in the tomb of Tutankhamun.¹ We must always bear in mind that with the exception of the Shaft-graves we have no LH tomb which was safe from the periodic depredations of the family to which it belonged. We may be sure that the rarest and most valuable articles would be first removed; it may well be that in the case of the iron knife and the tripod the fall of Mycenae enabled the tomb-robber to forestall the next of kin.²

A proto-Geometric grave at Vrokastro yielded another Cypriot tripod and a notable amount of iron;³ another of the same period at Knossos contained a similar tripod and iron swords and daggers,⁴ and yet another was found long ago in the same cemetery by Hogarth in a grave which also contained iron.⁵ There is therefore some reason to associate the trade in iron with Cyprus, which could afford to buy it from Phoenicia with the copper necessary for the latter's bronze-casting industry and which in all probability sent copper to Greece, Crete perhaps serving as an intermediary. Whether in this early period the Cypriot exports were carried in Cypriot or Cretan ships⁶ we cannot tell, but there is no reason to suppose that Phoenicia was concerned in the matter. The last tripod in the Aegaeon series is that found in the Early Geometric grave near the Pnyx,⁷ which contained a cremation. There is no reason to connect with Phoenicia any

¹ Knudtzon, *Die El-Amarna Tafeln*, I, p. 162, l. 16.

² Kuro's language on the dating is somewhat ambiguous. On p. 136 he states specifically that the tripod and knife are sub-Mycenaean though pre-Geometric. On p. 139 he says that the tomb-robber presumably perished in the final catastrophe which overtook Mycenaean Tiryns, for which he apparently assumes a date later than the fall of Mycenae.

³ Hall, *Vrokastro*, p. 133 and pl. xxxiv, 1, and pp. 138-9.

⁴ *JHS*, lv (1935), p. 167.

⁵ *BSA*, vi, p. 83.

⁶ The Cypriots had a certain reputation as men of the sea, though our evidence is of later date. They as well as Phoenicians were employed by Sennacherib to build on the Tigris for his expedition against Babylon in 694 a fleet which was afterwards dragged overland to the canals of the Euphrates (E. Meyer, *G. d. A.*, iii, p. 61). They were also credited with a thalassocracy, and it is interesting to note how well the archaeological facts fit the date (742-709) proposed for it by Myres (*JHS*, xxvi, 1906, pp. 120-2). For further discussion see Fotheringham and Myres in *JHS*, xxvii, 1907. The latter's purely historical argument for correcting the date (864-830) ascribed to it to the list as recorded in Jerome is based on the aggressive attitude of Assyria under Tiglath Pileser III towards Syria and the Phoenician coast cities, which might well make it difficult for Phoenicia to repress any independent maritime policy in Cyprus, as she would certainly have liked to do; and now we find within that period the first archaeological evidence of direct relations between Cyprus and Greece. For the date as recorded in Jerome there is no confirmation of any kind. That in the second half of the eighth century there were, as we should expect, both Greek and Phoenician kings in the island is proved by the list of the envoys who c. 709 made submission to Sargon II, which includes names of both Hellenic and Semitic type. The famous stele found at Larnaka (Kition) by which Sargon commemorated his victory gives the number of kings who made submission as seven.

⁷ *AM*, xviii, p. 414, pl. xiv; Lamb, pl. xi, a. An example dating very late in the eighth century has been found in Italy at Piedeluccio. *BP.*, Nuov. Ser. 3, p. 149, fig. 2.

of the Oriental objects in the grave of Isis, though they may have passed through Phoenician hands; some Attic ship may well have brought them from Cyprus. Native objects in the tomb,¹ however, show that Cyprus was exercising a certain influence on Attic craftsmanship. Three imitations in clay of the Cypriot tripod testify to familiarity with the form, and other Attic examples are known.² There is also a decidedly clumsy imitation from a Geometric tomb at Praisos which is certainly of local fabric.³ Vases in the shape of a pomegranate are fairly frequent in Greek Geometric art;⁴ the shape is possibly derived from a Cypriot model. A Late Geometric bowl from the Dipylon⁵ shows in its Oriental features affinities, not so much with Phoenician engraved bowls of metal as with a Cypriot imitation of one from Idalion.⁶ The winged human-headed demons have no parallel on the metal bowls and are definitely not Phoenician; they have their ultimate origin in the winged 'centaur' found on a number of Babylonian and Assyrian seals and on a Babylonian boundary stone of the early twelfth century.⁷ The throne of the seated divinity with its footstool is also on the Assyrian model, and both demons and throne find fairly close though far from precise analogues in Cypriot art. A nondescript winged quadruped with a human head appears on a Cypriot vase, two figures seated on thrones on another.⁸ The closest parallel of all, however, is to be found on the bronze bowl of Idalion, which is certainly Cypriot, not Phoenician,⁹ and which presents a seated divinity, a table of offerings, and a row of dancing women. This last *motif*, as Kunze points out, is common to all Greek Geometric art; it is found on the pottery of Attica, Boeotia, Argos, and Sparta, and its appearance here shows that Cyprus received as well as transmitted artistic influences. That its ultimate origin is Phoenician is not questioned; a remarkable parallel may be seen on an ivory pyxis from Nimrud in the British Museum.¹⁰

¹ *Eph. Arch.*, 1868, pl. iv, 3.

² *AM.* xliii (1918), pl. i, 5; *CAH.*, Plates, vol. i, p. 345. To these examples of Cypriot influence may be added the Late Geometric oinochoe with vertical circles on the sides, a derivative of the pilgrim flask; cf. *Cat. V BM.* i, n, C 865-73 (pl. ix), and R. S. Young, *Hesperia*, Suppl. ii, p. 208; Schweitzer, *AM.* xliii (1918), p. 144.

³ *BSA.* viii, p. 250, fig. 21.

⁴ *AM.* xliii, pl. iv, 2; cf. Johansen, *Les vases sicyoniens*, pp. 28-9. The evidence from Cyprus is not very copious. There is a pomegranate in terra-cotta in the Cyprus Museum, *Cat.* no. 3361. Johansen relies on the glass pomegranates imported from Egypt in the time of the XVIIIth and XIXth Dynasties (*Exc. in Cyp.*, p. 34, fig. 62, no. 1218; p. 35, fig. 63, nos. 1052-3). To these might be added the indigenous gold pendant, p. 18, fig. 35, and an example in ivory, pp. 14-15, fig. 24, no. 1563.

⁵ *AM.* xviii (1893), p. 113, fig. 10; P. and C. vii, p. 222, fig. 96; *KIB.*, p. 112, 9.

⁶ *Rev. Arch.*, 1872, pl. xxiv, facing p. 307; Colonna-Ceccaldi, *Monumenti antiques de Chypre*, pl. vii; P. and C. iii, p. 673, fig. 482.

⁷ Ward, *Cylinder Seals of Western Asia*, p. 4, fig. 2; p. 309, fig. 639; p. 210, figs. 631-2; and cf. Frankfort, *Cylinder Seals*, p. 156; P. and C. iii, p. 604, fig. 412.

⁸ P. and C. iii, p. 707, fig. 519; p. 711, fig. 523; the thrones lack footstools, as does that on the Idalion bowl.

⁹ Kunze, in the course of dealing with Cretan derivatives of Phoenician metal bowls, gives conclusive reasons for this view. *KBR.*, p. 213.

¹⁰ R. D. Barnett, *Iraq*, ii, p. 189, § 12, and pl. xxvi, 1.

So much for the alleged products of Phoenician art. The earliest certainly Semitic examples known from mainland Greece are the jewellery of the Aegina treasure,¹ the bronze bowls or fragments of bowls from Olympia, Athens, and Delphi, and an example from Rheneia, unpublished, in the museum of Mykonos,² and the engraved tridacna shells, examples of which are found distributed from Assyria to Italy;³ all alike date to the seventh century.

The case of raw materials is different. Those now in question, viz. gold and ivory, make their first appearance on Greek sites in the eighth century and continue to occur in increasing volume. There can be little doubt as to the immediate provenance of either. Egypt does not enter into the question; she no longer controlled trade with the south nor is there any evidence of contact between Egypt and Greece. The Phoenicians, on the other hand, had access to the ultimate sources of both materials via the Red Sea, from whose shores alone they could get their shells of *Tridacna squamosa*. Nubia is still the most probable main source of gold for Greece, though Ionia may have drawn on Lydia as well, or even exclusively. About the ivory there can be no question. The sole supply by this date must have been African, and it was controlled by the Phoenicians, who must have imported freely for their own vigorous school of ivory carving.⁴ It is true that in the days of Pericles Athens got her ivory from Libya,⁵ but the use of the oases route demands not only a weak Egypt but a Greek port or a port accessible to Greeks at some convenient point such as Cyrene. From Phoenicia, therefore, the ivory found on Greek sites must have come. Ivories at Sparta go back into the eighth century, and some at least were undoubtedly of local workmanship.⁶ Among the very earliest, however, are objects which are probably kohl needles;⁷ if they are, they must be imports, coming perhaps via a Phoenician depot on Cythera.

¹ The collection of Phoenician jewellery known as the Aegina treasure (*JHS*, xiii, pp. 195 ff.) has generally been accepted as dating to c. 800, but is now known to be little if at all earlier than 700.

² Poulsen, *Der Orient und die frühgriechische Kunst*, pp. 22-4, and Kunze, *KBR.*, p. 159.

³ *Tridacna squamosa*, the shell in question, is found in the Indian Ocean and the Red Sea, but not in the Mediterranean. Some examples may be imitations of Phoenician engraving, for unwrought or partially prepared shells have been found at Lindos and a single specimen at Naukratis, but Blinkenberg's hypothesis of a Cypriot studio established at Naukratis is far-fetched and postulates a date too early in the seventh century for such activity at Naukratis. Engraved shells, mostly fragmentary, have been found in Greek lands as follows: the temple site at Lindos, 9; Kameiros, 1; Cos, 1; Aegina, 2 fragments. Delphi furnishes an imitation in Egyptian alabaster. A number of fragments was found at Naukratis. See Blinkenberg, *Lindiaka*, ii-iv (Det kgl. Videnskabsnæstelskab., Hist. phil. Meddelelser. xi. 4); Poulsen, *op. cit.*, pp. 65 ff.; *JHS*, xlv (1926), p. 179.

⁴ R. D. Barnett, *PEQ.*, 1939, p. 13 and pls. viii-xi.

⁵ Kock, *CAF.*, i, p. 243, Herminippos, 63.

⁶ *AO.*, pp. 203 and 245.

⁷ *AO.*, pl. clxvii n. Blinkenberg found at Lindos ivory appliques, flat spoons, and figurines of unmistakably Oriental origin. See *Lindos*, i, p. 125, fig. 244; p. 149, nos. 419-27 and nos. 1581-3.

At Perachora there was not a fragment of ivory from the Geometric temple of Hera Akraia, which came to an end c. 750. In that of Hera Limenia, which was built very shortly before that date, ivory was found in the early strata only as part of the decoration of fibulae of the ivory-and-amber class; from the later come over 100 objects, at present unpublished, which must be dated above 700.¹

Though specially abundant in Sparta, ivory imports are not confined to that site. The Isis grave contained an ivory plaque-brooch and the contemporary Grave *d* on the same site² a fragment of another. The five ivory figurines from Grave XIII³ in the Dipylon cemetery, decorative adjuncts of some vanished wooden object, though they probably owe to the East rather more of their inspiration than Kunze in his penetrating study is inclined to allow, are of Attic workmanship and mark the climax of Geometric achievement in the treatment of the human form. They can be little earlier than 700. A more definitely Oriental note is furnished by the design on a gold strip from the same grave which shows a man between two lions, one of which seizes him by the head.⁴

Gold imports in Attica appear to be rather earlier than those of ivory, which are markedly scarce. Probably their first appearance is in the form of strips of sheet-gold, an example of which has just been noted;⁵ there is a considerable series of them, all so far as is known, from graves, where they are believed to have served as headbands for the dead. Oriental *motifs* which include the Centaur occur on the later, but the (typologically) earlier are decorated with ordinary Geometric patterns. Kunze's date of above 800 for the beginning of the series is undoubtedly too early, but there is no obvious reason why they should not go back beyond 750. A pair of gold fibulae, reputed to have been found in an Attic grave and now in the museum of Berlin,⁶ is of a somewhat earlier type than the Toronto specimen, which resembles examples from the Agora Graves XVII and XVIII.⁷ These graves are reckoned by Mr. Young among his earliest. A single specimen, also in Berlin,⁸ is approximately of the Toronto type and has only an eight-rayed star and a zigzag border as decoration.

¹ *Perachora*, i, pp. 53-4.

² *Eph. Arch.*, 1898, p. 103.

³ Mr. Young's reference (*Hesperia*, Suppl. II, p. 215) to Grave XI is apparently an inadvertence; the articles to which he refers are of bone. It might be argued, however, that they are imitations of ivory and a cheap substitute for it. For the figurines see Hamolle, *BCH.*, 1891, p. 441; *AM.* xviii (1893), pp. 127 ff.; P. and C. vii, pp. 142 ff., pl. iii; and for a detailed study by Kunze, *AM.* lv (1930), pp. 141 ff., pls. v-viii, and Beil. xl, xli. See FGS, p. 32 and pp. 36 ff., for a criticism by Hampe of Kunze's dating. The grave also yielded 3 small lions of falience.

⁴ *AM.* xviii (1893), p. 126, fig. 24.

⁵ Kunze, *KBR.*, Anh. i, p. 265.

⁶ Blinkenberg, *Les Fibules grecques et orientales*, pp. 77-8, 23 a and b.

⁷ *cf. supra*, Ch. I, p. 43.

⁸ Blinkenberg, *op. cit.* 170, viii. 5 f. Provenance unknown; originally supposed to be from Attica. Published by Furtwängler, *Kleine Schriften*, i, p. 462, pl. xvi, 3.

The volume of imports increases as the century advances. A pair of heavy spiral-and-disc ear-rings and a finger-ring of gold together with three of gold-alloy and one of silver are reported from a Late Geometric grave at Corinth.¹ There is a similar pair of ear-rings in the Ashmolean at Oxford, and a single example was found in the votive deposit of the Geometric temple of Hera Akraia at Perachora.² A surprising number of articles of gold acquired by Lord Elgin in Athens and believed to come from a single Attic grave may represent in part an accumulation extending over some little time, but two magnificent pairs of fibulae are decorated with horse and lion, ship and stag, in the purest tradition of Late Geometric art.³ Throughout we have noticed the exclusive preference of the Greeks for their own craftsmanship; it is interesting to see their nascent art rise to the challenge of the precious materials.

On the other side of the account we have evidence of direct relations between mainland Greece and Cyprus beginning well up in the eighth century, for the pottery of the Late Geometric period found on several Cypriot sites is too cheap a ware to have passed through the hands of intermediaries.⁴ Fragments of a wheeled tripod were found in the cave in Polis Bay in Ithaca;⁵ the type probably owes its existence rather to Cypriot than to direct Phoenician influence. The wheeled tripod has not yet been found in Cyprus, but wheeled bronze stands occur at an early date.⁶ This device, which originated farther east, was undoubtedly transmitted by Phoenicia; in the tenth century Hiram of Tyre supplied Solomon with lavers on wheels for the temple.⁷ Helen's wheeled work-basket was acquired in Egyptian Thebes,⁸ which probably means no more than that the poet was vaguely aware of the Oriental origin of such objects. Greek ships which visited Cyprus probably also put in at the Greek depot situated at Al Mina near the mouth of the Orontes, where Sir Leonard Woolley unearthed a pottery series which begins in the eighth century with the Greek

¹ *AJ.A.* (xli. 1937), p. 545, fig. 7. For examples in Berlin see Furtwängler, *op. cit.* i, pl. xv.

² *Perachora*, i, p. 74, pl. 18, 4.

³ The collection, which is at present deposited in the British Museum, includes two decorated gold strips, a necklace, bracelets, rings, and hair-spirals. There is also a pair of ornaments, possibly ear-rings, of much yellower gold than the other objects, finely granulated and certainly of foreign workmanship. Haugé dates the smaller pair of the fibulae to the third quarter, the larger to the end of the eighth century (*op. cit.*, p. 19 and pl. 7).

⁴ The pieces at present known are: Cernola's Dipylon amphora in New York, its once suspect provenance rehabilitated by subsequent finds (*Handbook, Cernola Coll.*, no. 1701); an oinochoe, perhaps Argive (*ibid.*, 1702); three Dipylon bowls (*ibid.*, 1703-5). In the British Museum, fragment of a large vase from Amathus (*Exc. in Cyp.*, p. 103, fig. 120); unpublished, Dipylon bowl and fragment of a second from Larnaka. In the museum at Nicosia, Argive Geometric krater of early type from Amathus (*Swedish Cyprus Expedition*, ii, p. 79 f.).

⁵ S. Benton, *BSA*, xxxv, pp. 88-9 and notes.

⁶ *Exc. in Cyp.*, p. 15, fig. 24 A.

⁷ 1 Kings vii, 30. Despite the corruptness of the text, so much is certain; see C. E. Burney, *The Book of Kings*, pp. 91 ff.

⁸ § 131.

ware known as 'island Geometric'—its exact provenance is unknown—and continues into the fourth century.¹

Late Geometric ware, especially Attic, is often decorated with ships, sea-fights, and descents on the land. Athens evidently had a powerful and adventurous fleet; though its doings are unknown to us, we may doubt if she allowed much competition from Phoenicia in her trade with Cyprus. In the *Odyssey* the Phoenician deals in ἀθύρματα, collecting in exchange πολὺν βίον: his most attractive bait is a necklace of gold and amber.² True, he is trading in 'Surie', but no doubt he might achieve an occasional deal in Greek waters. It is fairly certain that in the eighth century Phoenicia was sending to Greece and Ionia incense (λίβανος), which in the fifth century the Athenians got from Syria,³ and perfumed unguents, in epic known only to the Queen of the Olympians, but used with equal effect by Neoboule on earth in the seventh century.⁴ It is true that the evidence of surviving containers is lacking; but the proto-Corinthian aryballos, which begins in the third quarter of the eighth century, has been shown to be a perfume bottle.⁵ It is unlikely that the manufacture started independently among the Greeks just at the date when Oriental perfumes were becoming accessible to them; they must have seen a profitable trade and the possibility of ousting the Phoenicians from it. Moreover, the Corinthians, the producers of the aryballoi, by their occupation of Corcyra obtained ready access to an inexpensive source of scent in *Iris illyrica*.⁶ Finally, in view of the increased range and volume of her shipping, we may feel sure that Greece imported papyrus in the form of sails and cordage, as Athens did in the fifth century,⁷ and that in the eighth it came, not direct from Egypt, but via Byblos; before the end of the century she may well have been importing it as paper. This can be no more than conjecture; but the cordage is attested by the rope of papyrus in the house of Odysseus.⁸

Though all the incontestably Phoenician articles found in Greece—the bronze bowls from Olympia, Delphi, Athens, and Rheneia (to which may be added two from the Idaean cave and one from a grave near Knossos),⁹ the jewellery of the Aeginetan treasure, and the tridacna shells—belong to

¹ *JHS.* lviii (1936), pp. 7 ff.

² *ibid.* 416, 456, 466.

³ Kock, *CAF* i, p. 243. Hermippos 63.

⁴ *Σ* 171-2, *Archil.* 39 B; 36 D. Cf. *ε* 192-4.

⁵ Payne, *NC.*, p. 5, n. 3. R. S. Young regards as perfume bottles the hand-made aryballoi frequent in Late Geometric and Early Orientalizing graves, and notes a possible example in a funeral scene of the use of incense at a funeral. *Hesperia*, Suppl. ii, pp. 20 and 86.

⁶ Stated by Theophrastus (*H.P.*, ix. vii. 3-4) to be the only perfume plant peculiar to Europe. Pliny (*NH.* xiii. 5) notes the favour long enjoyed by the Corinthian unguent manufactured from the root. In his day *nardus Gallicus* was another unguent of European origin. See R. L. Beaumont, *JHS.* lvi (1936), p. 184. The importance of the *Iris* in this connexion was first realized by the late A. A. Blakeway.

⁷ Kock, loc. cit.

⁸ *ε* 391.

⁹ Mihani, *Studi e Materiali*, i. 27, figs. 28 and 29; cf. Poulsen, *Der Orient*, p. 22, and Kunze, *KBR.*, p. 36; *JHS.* lili (1933), p. 292.

the seventh century, it does not follow that no ἀθήματα accompanied the gold and ivory imports of the eighth century for which the Phoenicians seem to have been at least ultimately responsible; as so often, we must deplore the absence of evidence from Ionia.¹ Most of the articles come from sanctuary sites; only the bowls from Rheneia and Knossos and the Aeginetan jewellery are certainly or presumably from tombs. The complete bowl from Olympia (of which the Rheneia example is said to be almost a replica) bears the names of a man and his father inscribed in a Semitic language variously described as Phoenician and Aramaic.² A similarly inscribed silver bowl from the Bernardini tomb shows that there is no reason to regard the name as that of the dedicator.³ It is obvious that the distribution of the scanty Phoenician objects found in Greece affords no clue to the routes they followed or the ships in which they were carried, since Greeks were trafficking with Cyprus and the Syrian coast. Yet Phoenician ships on their way to Sicily or Sardinia must have had regular watering stations in Greek lands and would certainly not neglect the opportunities for trade which they offered. Hence the existence of Phoenician depots is probable in itself; the mere name Phoinix or Phoinikous has, as we shall see, no evidential value in itself, but sometimes the site is a likely one and occasionally, though very rarely, there is corroborative evidence. Reference has been made above to the best attested of all, the port Phoinikous on the island of Cythera. The name was in current use in the fourth century (Xen. *Hell.* iv. viii. 7). Herodotus (i. 195) testifies to the existence on the island of a temple dedicated to Aphrodite Ourania, originally a Phoenician foundation and presumably situated in the port. It is legitimate to conclude that Aphrodite's epithet *Κυθηραία* which occurs twice in the *Odyssey* (θ 288, σ 193) denotes the lady of Cythera; in view of the extreme freedom of the Homeric hexameter in the matter of alternative quantities the ε gives no ground for cavil. The composer of two lines at least of the *Odyssey*—not to prejudice the question of authorship—knew of this exotic shrine and may have seen it. Obviously this Phoinikous was a convenient stopping-place on the Phoenicians' way to the west, and the same is true of the similarly named port on the coast of Messenia east of Methone;⁴ it marks another stage of that coasting voyage to Sardinia and Sicily of which Odysseus knew something when he asked a Phoenician skipper whose ship was lying in a Cretan harbour to put him ashore at Pylos or in Elis. The Cretan harbour in question was presumably that other Phoinikous, also known as Phoinix and Phoinike, on the south coast of the island, in which St. Paul's skipper would have liked to pass the winter; it is, indeed, the only

¹ It is true that there is nothing Phoenician in the Iasia deposit of the Artemision of Ephesus.

² *OL*, iv, pl. lii, no. 883, and Furtwängler, op. cit. i, pp. 38 ff.

³ *Memoirs of the American Academy at Rome*, iii, p. 41, n. 3; cf. MacIver, *Villanovans and Early Etruscans*, p. 211.

⁴ *Pauls*, iv. 34, 32.

port on the south coast which provides adequate shelter for such a sojourn,¹ and is also well placed to be the last port of call on a voyage to Carthage. On the other hand, the poem betrays no knowledge of Phoenicians within the bounds of the Aegaean. This silence may be due to the fact that the false tales of Odysseus, in which all the allusions to the Phoenicians occur,² appear to be based on Cretan sources and therefore naturally deal with east and west or north-west routes, whereas Phoenician investigation of the Aegaean would start from Rhodes and go northward. Apart from Thucydides' mention (viii. 34) of the Ionian Phoinikous which provides a case for consideration, we have literary testimony, unfortunately not unimpeached, from another quarter for Phoenician exploration in this region; Herodotus (vi. 47) claims to have seen on the east coast of Thasos Phoenician gold-mines much more remarkable than any of the other workings. Tozer,³ however, could find no traces of any ancient mining in the Koinura region where Herodotus puts the Phoenician activities; and his observations are confirmed by a more recent traveller, Mr. Oliver Davies, who informs me that 'there are plenty of ancient mines in the S. and W., but not much in the E. . . . There is no evidence whatever for associating them with the Phoenicians, and most extant remains seem pretty late.' This leads to the reconciling hypothesis that as we know that there was plenty of early mining by the Greeks in the island, the traces of their activity and that of the Phoenicians may alike have been obliterated by subsequent operations; yet this conflicts with the statement of Herodotus that the Phoenicians had turned a whole mountain upside down. Difficult as it is to reject a specific statement of the historian concerning what he had himself seen, the weight of the evidence is against him. If we accept it, we must infer that the Phoenicians had some degree of control in the island for a considerable period, which must have begun in the eighth century. Their tenure cannot have continued very far into the seventh, for their presence would not have been tolerated by the Parians, who colonized Thasos probably in 680 and certainly not later than 660.⁴ If the Phoenicians were indeed established there in the eighth century, we may perhaps see in that fact the occasion of the solitary allusion to them in the *Iliad* (*Ψ* 744); it may be contemporary, but it may equally well be a seventh-century interpolation based on the *Odyssey*, comparable to the erroneously amplified account of Egyptian Thebes in the ninth book;⁵ the implied distinction between Sidonians and Phoeni-

¹ See Bunian, *Geog. Gr.* ii, p. 547. The name Phoinike is given to it in the *Acts* (xxvii. 12) Phoenice in the *AV*. Ptol. iii. 17. 3 explains Phoinikous as *Λαγύρ* and Phoinix as *ῥόδος*. *Ἀραδίη*, the town perched 2,000 ft. above the port, is equated with the Phoenician town-name Arvad, which points to something like a settlement.

² *Islands of the Aegean*, p. 307.

³ *RE*, v A 2, col. 1311.

⁴ See *infra*, pp. 97-8. Lemnos would of course be a natural, almost an inevitable, port of call for a ship making for Thasos by way of the west coast of Anatolia. The statement of Thucydides (i. 8. 1) about Phoenician settlements in the Aegaean in the pre-Hellenic age is certainly untrue, and we may note that he does not offer any archaeological evidence as he does in the

cians shows misapprehension.¹ Phoinix as the name of two or three rivers in Greece and a mountain in Boeotia can hardly be other than a colour epithet, though no attempt seems to have been made to verify its appropriateness; but there is a residue of place-names to which neither of the explanations so far adduced is applicable, notably that of the inland town Phoinikous in Epirus. It is commonly supposed that because the date-palm does not fruit in Greece it cannot propagate itself there, but this is incorrect. It propagates itself by suckers from the stem;² these can easily be transplanted, and groves thus formed could doubtless be maintained with a certain amount of care. Theophrastus (*HP.* iii. iii. 5) implies that the tree was not a rarity. One such nursling is recorded—the *φοίνικος νέον ἔπος* which Odysseus saw by the altar of Apollo on Delos (*ζ* 162-3).

That the palm flourished in Minoan Crete is certain from its appearance as a *motif* in art, especially in Minoan vase-painting; a grove exists in the island to-day, though the antiquity of its origin is doubtful, and the tree is said to fruit, though not very successfully, in certain favoured spots.

It seems probable that in the days of Mycenae's greatness palms were brought to Greece, most probably from Ugarit or Cyprus, that they were propagated there long enough to attach their names to certain localities, to the town in Epirus, possibly (in the form Phoinike) to the Cyclad Ios³ and to Tenedos;⁴ possibly also to the Phoinikous *ὕπὸ Μίμραντι* quoted by Thucydides. Why Corinna and Bacchylides both called Caria Phoinike remains obscure.⁵

Since we know that Delos was inhabited in Mycenaean days, it is not unreasonable to suppose that the palm was introduced there in the Bronze Age and had not been suffered to die out, that the tree by the altar was a scion of an ancient grove and had had on the spot predecessors which had been the object of an older cult.⁶

parallel statement about the Carians. Presumably he was following the accounts of the logographers, who may have worked on a basis of tradition concerning Phoenician intrusion in the eighth century. The purely mythical account of Rhodes (where Thucydides makes no mention of Phoenicians) preserved for us by Diodorus (v. 38, 2) possibly contains a grain of truth disguised in the statement that Kadmos built a temple to Poseidon which continued in later days to be served by Phoenician priests. If there was such a temple, it was presumably founded in the course of Phoenician expansion in the eighth century and finds a parallel in the Phoenician foundation in honour of Aphrodite on Cythera (van Gabeler, *Geschichte der alten Rhodier*, p. 40). The town Phoinike in the Peraia was later, as we should expect, a normal Greek community, whose citizens possessed full Rhodian citizen rights (*ibid.*, p. 193); it may have originally been a Phoenician depot, but there are other explanations at least as plausible. The Rhodians seem to have been strong enough to exclude or soon to expel the Phoenicians from the island, where no trace of the name survives.

The Sidonian slaves of Hecuba in *Z* occur in an interpolation which is little if at all earlier than the sixth century.

¹ Martin Möbius, *Pflanzenbilder der Minusischen Kunst in botanischer Betrachtung*, Jb. xviii (1933), p. 16. ² Steph. Byz., s.v. ³ Pliny, *NH.* v. 140.

⁴ Athen. iv. 174 F. Mt. Phoinikous near the S.E. tip of Iykia may supply a reason for the Phoenician speech with which Choirilos of Samos endowed the Solymi in the army of Xerxes (Kinkel, *EGF.* i, p. 268, nr. 4).

⁵ The story of the part played by the tree in Leto's travail was probably already current.

We have found Phoenician seafaring westwards, so far as it is described in the *Odyssey*, to lie well within its actual extent (as we are able to infer it from the Sardinian inscriptions) from a date above 750, and this narrow limit coincides with the boundary of Greek geographical knowledge in the same period. There is no hint that Greek and Phoenician had met in their struggle over Sicily. If we leave the dubious ω out of account, the Sikels are mentioned only once in the *Odyssey* and only as affording a market for slaves. As we can hardly date the composition of the *Odyssey* as early as c. 750, we must suppose that the poet is indicating the state of affairs some half-century earlier than the period in which he himself lived and worked; Odysseus was a hero of the Trojan War and must be surrounded with an atmosphere of antiquity. In the few allusions made to Phoenicians in the poem we are aware of an atmosphere of dislike and distrust which would very well suit that part of the eighth century which witnessed the ousting of the Phoenicians from most of the Sicilian coast. Yet there must have been a point where Greeks and Phoenicians met with some intimacy and in an atmosphere not purely hostile. The adoption by the Greeks of the Phoenician alphabet must have taken place before the middle of the eighth century. The date of the famous Athenian prize jug,¹ disputed though it be, can hardly be later than 725 and the letters employed in the inscription on it include χ , one of the signs added to the original alphabet by the Greeks. That they knew and used it in its purely Phoenician form is proved by the rock-cut inscriptions of Thera which dispense with all the Greek additions and thus show that, whatever their date, the alphabet had reached the island in its original form. Elsewhere the additional signs are found in the earliest inscriptions throughout the Greek world, and as they are everywhere virtually identical in form though not in meaning, the implication is that the alphabet was spread not by the Phoenicians but by the Greeks themselves.

The most probable point of contact is in the Phoenician ports of Cyprus; there is no evidence that the port at the mouth of the Orontes was in being in the first half of the eighth century. That the Cypriot Greeks continued to employ their inconvenient and inadequate syllabary till the days of Alexander, at any rate for official purposes,² is quite in keeping with their highly conservative character, also exemplified in their retention of the war-chariot in the fifth century.

Everything then points to a date in the first half of the eighth century for the establishment of commercial relations between Greeks and Phoenicians, and if we examine the history of the Near East, we find that the course of events there agrees well with the period indicated. In the ninth when the *Odyssey* was composed; it may have been invented to account for the presence of the palm-tree, if this, indeed, went back farther than the altar.

¹ IG. p. 919; *AM.* xviii (1893), pl. x; *Handbuch der Altertumswissenschaft*, vi. 1; *Handbuch der Archäologie*, i, pp. 195 ff.; v. *infra*, Ch. IV, p. 129.

² It is unlikely that it was employed in the business of everyday life.

century the Phoenicians must have been preoccupied by their constantly renewed struggle with Assyria; if they indeed achieved the foundation of Carthage before the end of it, such an undertaking would suffice to absorb their surplus energy and divert their attention from the Aegæan. The period of Assyria's eclipse, however, beginning with the accession of Shalmaneser IV in 782 and continuing till that of Tiglath Pileser III in 745, would give Phoenicia exceptional freedom, which she may have used to explore the possibilities of Greek waters.

The little that Homer tells us accords remarkably well with what we have been able to infer from mainly archaeological evidence about these activities. One of the tales of Odysseus shows us how a Phoenician voyage to Libya¹ would naturally begin. The first landmark mentioned is Crete, which suggests a coast-hugging run, aided by Beaufort's westward current, along the southern shores of Asia Minor. Rhodes is not mentioned, but must have been sighted, and we may feel certain that a ship following this course would replenish her water-supply either there or at some point on the well-watered strip of coast between the mouth of the Myra and Hiera Akra on the Lykian coast,² or even, possibly, as far east as the west coast of the Gulf of Pamphylia, under the shadow of Mount Phoinikous. Only when *ἐνὲρ Κρήτης*, which, alike from the point of view of the poet in Ionia and the hero in Ithaca, means south of the island, does the ship find herself out of sight of land. Travellers to Libya would naturally leave the Aegæan unvisited, and Odysseus does not mention any stop at Crete; but as the island would afford the last opportunity of obtaining fresh water, it must in fact have been a frequent port of call. Further, Phoinix, Phoinikous, or Phenice, the name of the Cretan harbour on the south coast, suggests something more than such transitory contacts. Hence the Phoenician bowls from the Idaean cave; hence, too, perhaps the Phoenician influence which, along with others, manifests itself more prominently than elsewhere in the decoration of the Idaean shields. These belong, however, to the seventh century, and we cannot fix the date of the place-name, either in Crete or elsewhere; it is probable, however, that in all cases it goes back to the period of unhampered Phoenician expansion rather than to the later date of Greek competition and triumph. Homer therefore, if not Odysseus, is telling a quite plausible tale when he represents a Phoenician ship as lying in a Cretan harbour³ whence it could equally well proceed south-west to Libya or north-west to Coreyra and thence to Sardinia. The projected journey to Libya⁴ also speaks for a date after the foundation of Carthage. None of the passages which refer to Phoenicians shows any knowledge of Phoenicia on the part of the Greeks, and this agrees with the negative results of archaeology so far.⁵

None the less there are curious discrepancies which suggest links with

¹ § 293 ff.

² *Karamania*, p. 9.

³ v 272.

⁴ § 295.

⁵ Greek Geometric ware has not so far been found south of the mouth of the Orontes.

the Bronze Age. The avoidance of the name of Tyre has been noted; yet in Homer's day a guest of the king of the Sidonians with whom Menelaos stayed¹ would in fact have found himself in Tyre. 'Sidonian' is the Greek rendering of the name by which the Phoenicians called themselves and by which they are often designated in the Old Testament. After the rise of Tyre to the position of leading city her king often added to his title that of king of the Sidonians, thereby presumably claiming overlordship of Phoenicia as a whole. The alternative is to suppose that we have here a trace of Bronze Age nomenclature, in use in the days when occasional Mycenaean adventurers from Ugarit might visit the Phoenician coast and especially Sidon, then pre-eminent. King Phaidimos, however, cannot be a traditional figure; his name is merely a heroic epithet.

SYRIA

The name Sidonie,² once applied to the country elsewhere called Phoinike, appears to be a Greek coinage; the Phoenicians called their country by a name which the Greeks represented by Χιτᾶ,³ the Canaan of the Bible. The unique mention of the town of Sidon πολύχαλκος as the home of the Phoenician nurse of Eumaios,⁴ is doubtless a line derived from Bronze Age sources. In fact the whole story of Eumaios (ο 403 ff.) looks like a fragment of a Bronze Age tale perhaps brought into renewed popularity by the foundation of the Greek port on the Orontes. Only the opening episode has been utilized; the original narrative must have given Eumaios a more adventurous career and ended in his return home and recognition by his parents. Surie, the happy island where the father of Eumaios ruled and whence the child was kidnapped, can hardly be other than Syria; there are only two objections to the identification, and both on examination prove to be, if not wholly illusory, at least of very doubtful validity. To the first, that Syria is not an island, it may be answered that in the early days of exploration any region which its discoverers reach by sea is apt to be regarded as one until its hinterland has been investigated; witness the Roman belief that Scandinavia was surrounded by water.⁵ The second is based on the phrase ὅθι τροπαὶ ἡελίου. In Hesiod and later literature generally the τροπαὶ mark a date, that of one or other of the solstices, but these are determined by the points at which the sun on the longest and shortest days respectively appears above the horizon. Plainly in our passage it is place, not time, that is indicated, but the τροπαὶ in this sense do not afford a practical means of defining a locality. Since the appearance of Wilamowitz's paper on Pherecydes⁶ his acceptance of an ancient solution (viz. the identification of the τροπαὶ

¹ δ 618 = ο 118.

² = 285.

³ Hecataeus ap. Herodian *επεὶ μόν.* Με. 8, 8; *FGH.* (Jac.) i, p. 36, no. 272. The region south of the Lebanon is called Kinahna in the Tell-el-Amarna letters (Bilabel, *Gesch. Vorderasiens u. Ägyptens*, i, p. 9, n. 1) = the Canaan of the Old Testament.

⁴ ο 425.

⁵ Mela iii. 31; Pliny, *NH.* iv. 96; Tac. *Germ.* 44.

⁶ *Sitzb. Pr. Ak. Wiss.* xvi (1926); see pp. 125-6.

with the heliotropion which could be seen on the island of Syros in historic times and was believed to be the work of the appropriate Pherecydes) appears to have been generally approved. As Wilamowitz pointed out, this is the obvious meaning of the meagre scholia on the line.¹ Pherecydes' invention was doubtless of the simplest construction; a fourth-century example at Itanos² consisted merely of a stele erected by a public-spirited citizen on a seaward-facing site from which a bearing taken over a small reef determined the point of the *χειμερινὰ τροπαί*. Apparently the heliotropion of Pherecydes (which may have been no more than a couple of scorings on a pair of rocks suitably alined) was in a cave which was known in consequence as the cave of the sun. Conceivably the arrangement (whatever it was) may have come to be known as the *τροπαί ἡλίου*, though the expression is odd; what is hard to credit is that the poet should have been capable of such a frigid jest as identifying the all-but-fairyland of Eumaios' description with places familiar to himself and his audience as Delos and Syros. That Syros enjoyed no advantage over other Aegaeian islands in climate, fertility, or, it is to be presumed, vital statistics, robs the joke of any point it might have had.

Though this identification was accepted by Aristarchus, it was not the only one current in antiquity or known at Alexandria. Eratosthenes is quoted by Strabo (i. 23) as holding that 'Hesiod' had travelled in Italian and Sicilian waters and had convinced himself that the Ortygia of the *Odyssey* was the Syracusan islet; obviously according to the same source Surie must have been Syracuse.³ This implies that the meaning of the *τροπαί ἡλίου* was taken to be the setting of the sun, and that this solution survived in some quarters appears from its mention by Eustathius, who quotes λ 18 (to which we may add μ 381) to show that *τρέπεσθαι* can be used of the sun's decline from the zenith.

This is at least a more satisfactory solution than that which equates Ortygia with Delos, but it ignores the only other allusion to the place in Homer. In ε 123 we are told that Eos carried off Orion to Ortygia and that Artemis slew him there;⁴ neither here nor in ο is it said to be an island.

¹ *ἔθθα φασὶν εἶναι ἡλίου σπήλαιον δι' οὗ σημειοῦνται τοῦ ἡλίου τροπαίς*. QV. *οὐκ ὡς πρὸς τὰς τροπαίς ἡλίου, ὅς ἐστιν ἐπὶ τῷ δυτικῷ μέρει ὑπερέκστης τῆς Ἀἰόλου*. αὐτοὶ Ἀριστάρχος καὶ Ἡρόδιανός, BAQ. The second scholion appears to explain that the position is indicated, not from the point of view of Eumaios in Ithaca, for whom Syros would not be 'beyond' Delos, but from that of the poet, presumably in Ionia. This explanation is also preserved in Eustathius and is consequently much discussed by Homeric scholars of the seventeenth and eighteenth centuries; see especially Mue Dacier, *ad loc.*, and Robert Wood, *Essay*, pp. 9 ff.

² *Syllage*, 1264.

³ The fact that for a Hesiodic poet Ortygia and Surie lay in the far west shows that at a comparatively early date the Pherecydes solution was at least not generally accepted; I see no reason to suppose that it had yet been invented.

⁴ The name of Ortygia is undoubtedly associated with Artemis. We know of three genuine Ortygias: the Syracusan, which must go back to the first settlement there of the Greeks; a sanctuary of Artemis on the Artolian Mt. Chalkis (Schol. Ap. Rhod. i. 419; cf. Scholl. B and T on I 557), and a grove sacred to Artemis on the Anatolian coast near Ephesus (Strabo

The goddess of dawn can hardly have carried her capture to any other region than the East, but there is no reason to think the place any less mythical than the isle of Aiaie where she has her dwelling and her dancing-place (μ 3). It is mentioned in ο 404 to indicate the direction in which Surie is to be looked for; otherwise it might have been sought in the West, where those gates of the sun past which Hermes piloted the ghosts of the Suitors (ω 11-13) must have been situated. Engaged in a perpetual *diaulos*, the sun necessarily has two turning-points, one in the west and also one in the east. How his return journey was accomplished we learn first from Mimmermus;¹ setting out from the Garden of the Hesperides which, as we learn from Hesiod, lay beyond the streams of Ocean, he sleeps through the night in the winged golden bowl which Hephaistos made for him and in which he is carried skimming the waves of Ocean to that place in the land of the Aithiopes (plainly the eastern Aithiopes of α 23-4) where he re-enters his chariot and sets out on his daily course. According to later sources the bowl also conveyed the horses and presumably the chariot. Surely both changes of direction have an equal claim to be called *τροπαί*. The conception of the bowl is popular and alien to the spirit of epic, and is naturally ignored, though probably assumed, in both *Iliad* and *Odyssey*; hence we cannot tell how far the folk-lore *motif* had been elaborated in Homer's day.²

If this explanation of the *τροπαί* is accepted, every indication favours the identification of Surie with Syria. Eumaios is a Greek; the poet, probably following his source on this point, gives us a clear case by equipping his father with a patronymic (Ormenides), a distinction which no barbarian, to speak anachronistically, enjoys in either epic.³ We are looking therefore for a place in the East, far from Greece, but ruled by a Greek basileus. The land is good for corn and vines; it has the rich pasture which cows need as well as the rough intermittent browsing of the hill-side

639 *sub fin.*), The Ortygia at Chalkis on Euboea where Leto halted with the twins on the way to Delphi is a figment, and it is improbable that Delos was ever called Ortygia by anyone but poets and mythographers. The Aetolian sanctuary, belonging to a town near the entrance to the Corinthian Gulf, may well have been founded by men who on journeys to and from Coreya and Sicily found in the town a convenient port of call; Chalcidians of Euboea had interests in the latter. Both the Aetolian and the Sicilian sanctuaries may have had their metropolis in the territory of Ephesus.

¹ 12 B., 10 D. The Hesperides and their garden are nowhere mentioned in Homer but, since they appear in Hesiod (*Th.* 215, 275, 518), the conception must have been familiar at least to the poet of the *Odyssey*, in which their neighbour Atlas is twice mentioned as the father of Kalypso.

² In Homer the sun rises from Ocean to ascend the heavens (*H.* 421-3, τ 433-4; and γ 1 where Ocean is called *Ἄλυσ*) preceded by Eos, who similarly rises from Ocean (*T.* 1, x 197, φ 244, 347). The sun is once said to sink into Ocean at the end of day (*Θ.* 485); more often, and by himself, he is said to descend to or beneath the earth. This only means that for a large part of the population even of Greek lands the sun would not drop into the sea, but would disappear behind a land horizon. *Hymn. Herm.* 68 shows that the phrase was thus interpreted. Beyond Ocean come his gates and the *δφωρ δελφειν*, i.e. Night, as the Scholiast tells us; the complications which appear in Stesichoros arising from the loan of the golden bowl to Herakles do not concern us here. See Vurthum, *Stesichoros*, pp. 16 ff.

³ The Trojans and their allies are not in this matter treated as barbarians, but Kimures is (Δ 20).

which is enough for sheep and goats. The climate is so healthy that you practically cannot die there except of old age, and yet, strangely, the place is by no means overcrowded. Odysseus praises Crete because her inhabitants are πολλοί, ἀπειρέσιοι, and there are ninety cities in her, but Surie is οὐ τι περιπληθὴς λίγην τόσον. It sounds almost like an immigration prospectus such as might induce yet another swarm of Achaeans to hive off and seek their fortunes at the east end of the Mediterranean, and yet it is a fair enough description of the tip of the 'fertile crescent' whence a main trade route leads into the interior. Surie has two cities, which sounds like a tradition of a place once known. It is perhaps permissible to hazard a guess—it can be no more—at their identity. Ugarit does not come into the question, for, important as was the Mycenaean element there, it was none the less subordinate in a Semitic city; nor is the surrounding country at all as outstandingly fertile as that to which the mouth of the Orontes gives access—the Orontes, which in ancient days was navigable up to Antioch. In this region Sir Leonard Woolley has examined the site of Sabouni, a natural mound now about $4\frac{1}{2}$ miles from the mouth of the river. Here he found a site fortified in Greek times and a pottery series which began with Mycenaean or rather with local imitations of it¹ and after an interruption of some centuries resumed with Greek ware of the latter part of the eighth century ('island Geometric') and continued till the fourth. Farther down the river, to-day a mile and a half from the coast, which has advanced, is the Greek site known to-day as Al Mina, in ancient times the port of Sabouni. Here the pottery series begins in the eighth century and continues into the fourth. The first chapter, however, of the history of Al Mina is missing. The course of the Orontes has changed more than once, and in one of these divagations it cut away the northern and eastern part of the mound, adjoining that where the earliest Greek pottery was found. How much has perished there is no means of estimating, but as Mycenaean Sabouni must have had a port, it is a fair inference that it was situated at Al Mina; at any rate it cannot have been very far off. Both these settlements would be seen and at least one visited by every Mycenaean ship that passed on its way to or from Ugarit. Whence better could a Phoenician kidnap a Greek child? In the *Odyssey* the Phoenician ship was carried by a storm to Ithaca where Laertes made his purchase, but the poet, basing his story on traditional material, could invent no more plausible means of bringing him into touch with a Phoenician trader. In the original tale Eumaios was probably sold in Sidon.

Historical situations recur, especially when they are conditioned by

¹ The sherds are few, and it is not certain any are genuinely Mycenaean. They bear witness however, to Mycenaean contacts and indicate the route by which the Mycenaean ware found at Tall Atchana reached its destination. See *JHS*, lvi (1935), pp. 122-7. It is now possible to add that actual Mycenaean objects of a date earlier than 1200 have been found at Sabouni. That Al Mina was its port at the same date can no longer be doubted. See note by Sir Leonard Woolley on p. 128 of *JHS*, lxxiii (1948), published in the first week of January, 1950.

geography; the story of Greek colonization of the Ionian coast repeats itself on a small scale—Mycenaean (= Achaean) settlement in the Late Bronze Age, withdrawal followed by similar centuries of inactivity, and then Ionian activity again—on the lower reaches of the Orontes, at Poseideon, and probably elsewhere. At no date would a tale from the heroic past staged in the same region appeal more strongly to the poet or his audience.

THE NAME PHOINIKES

Now that intercourse between Greeks and Phoenicians is known to have begun in the Mycenaean age, it is fairly certain that the name Phoinikes goes back to the same date and was applied by the Greeks to the same Semitic people ever after. Fick's¹ theory that the name with the meaning 'Redskins' was given by the blonde Indo-European invaders of Greece to any darker-skinned race with whom they came in contact, whether in their new home or abroad, has lost all plausibility; and the origin of the name, whether it was coined by the Greeks or corrupted by them from some foreign appellation, is of little interest to the student of Homer. The point at issue is whether the Greeks formed the word from *φωνός*, *φολίος* or took over an Egyptian word *fnhw* of somewhat uncertain significance. In the last century Egyptologists and others were inclined to regard *fnhw* as denoting the Phoenicians and as the origin of the Greek name Phoinikes, to which the Greeks attached a meaning of their own. There is no doubt that from the beginning of the XVIIIth Dynasty onwards the word is applied to any of Egypt's Asiatic neighbours to the north, in Palestine, Phoenicia, and Syria alike. It first appears under the Old Kingdom as an epithet meaning, apparently, 'skilled', and it is stated that it further acquired the specific meanings of 'carpenter' and 'shipwright'. If this is so, the term may well have been applied at an early date to the Phoenicians, on whom Egypt depended for her timber and from whom she presumably learned the art of building sea-going ships; further, they appear to have been the first northern Semites with whom she came in contact.

The nineteenth-century theory was attacked by W. Max Müller in 1893² and lost its popularity; Meyer, who in the first edition of his great history had given it cautious support,³ vigorously repudiated it in the second,⁴ as well as the somewhat modified form in which it had been revived by Sethe in 1916. According to Sethe,⁵ behind *fnhw* lies a word which, owing perhaps to some similarity of sound, the Egyptians equated with their own word for carpenter, while the Greeks for a like reason assimilated it to their own colour word, with the meaning 'purple-dye man'. The difficulty is to

¹ *Vorgriechische Ortsnamen*, pp. 123-4.

² *Asien u. Europa*, pp. 208 ff.

³ *G. d. A.* ii (1893), p. 147.

⁴ *Ibid.* ii. 1 (1928), p. 97, n. 1.

⁵ 'Der Name der Phönizier bei Griechen u. Ägyptern', *Mitt. Vorderasiat. Gesell.* xxi (1916), pp. 305 ff. Sethe's most recent critic is E. A. Speiser, 'The Name Phoinikes', *Language*, xii, no. 2, 1935, p. 122.

account for this unknown word. It should be Semitic; but the Phoenicians, as we have seen, called themselves Sidonians and their country Canaan. Our knowledge, however, is scanty; Ugarit or some other site may yet supply the information.

That the Greeks themselves derived the name from *φωνός* or alternatively from *φόνος* is stated in *Et. Mag.*, where the first meaning of 'blood-coloured' is said to have been derived from the red cliffs of the sea by which the Phoenicians originally dwelt and from which that sea also took its name. On the second hypothesis (also given in pseud.-Arist. *de Mir. Ausc.* 132 (843 b)) the Phoenicians owed their name to their murderous disposition. Oddly enough, no ancient authority connects the name with the purple industry, the explanation given by most modern scholars; it must also have occurred to the ancients, and the gap in tradition must be fortuitous.

2. EGYPT

That the relations of Minoan Crete with Egypt were close, fairly continuous, and not limited to the material exchanges of commerce has become ever clearer as the exploration of Knossos and others of her cities has proceeded, and they were never more intimate than for a period in the fifteenth century, in the later days of the XVIIIth Dynasty, i.e. up to the destruction of Knossos. Cretans visited Egypt and saw the marvels of Thebes with their own eyes;¹ and the strong Minoan influence visible in contemporary Egyptian art² shows that their position was something more than that of humble tributaries. It used to be supposed that in these relations Mycenae had little or no share, that her exclusion from direct trade with Egypt was a fundamental part of the policy of Knossos, and that stray objects of Egyptian origin found in the Shaft-graves of Mycenae and the tholos tomb of Vapheio had reached their destinations via Crete.³ It is true that not until after the destruction of Knossos c. 1400 B.C.—and whatever the cause of that event, there is no question who profited by it—in fact not until the second quarter of the fourteenth century or near it does Mycenaean pottery appear in abundance in Egypt; but whatever the desires of Knossos, she did not in fact succeed in barring the products of mainland Greece from Egypt in the fifteenth and even the sixteenth century.

As stated above (p. 14), a list of nineteen LH I and LH II vases found in Egypt has already been drawn up and may be added to as scrutiny of

¹ *Essays in Aegean Archaeology*, 'Kefiu', H. R. Hall, pp. 31 ff.

² e.g. in a floor-painting in the palace of Amenophis III; the influence is perpetuated in the frescoes of his successor's palace at Tell-el-Amarna. See Finnen, *Die kretisch-mykenische Kultur*, pp. 206-7, figs. 109-200; Bossert's, 565 and 567.

³ See Kato, *Schachtgräber*, p. 258 and pp. 316 ff., especially p. 319. The Shaft-graves yielded some ostrich eggs and a not very considerable quantity of ivory, the Vapheio tholos two alabaster vases and a silver spoon of an Egyptian type. The well-known axe-head with double perforation from the same tomb is also of an Egyptian type. See Pendlebury, *Aegyptiaca*, p. 44.

relevant vases by experts is carried further; it already is many times longer than that of vases of the same period found in Egypt and attributable to Crete. It is true that nineteen vases distributed in time over two centuries tell us nothing of the volume or nature of the trade to which they bear witness; they do, however, establish the fact of relations. Whether that means direct contact the evidence, of course, is wholly inadequate to decide; the case for it, however, is at least as good as that for transmission by Cretan middlemen. One of the most interesting results of recent excavation in Syria and Palestine is the tracing of Mycenaean trade with those regions towards the end of the fifteenth century, though here, too, evidence becomes copious only in the fourteenth century. At Ugarit on the Syrian coast Dr. Schaeffer found an alabastron of LH II date¹ and in a chamber-tomb at Mycenae, in an LH II context, Professor Wace found a Hurrite cylinder seal, from the hinterland of the north Syrian coast; a similar seal was found at Argos.² Tenuous as it is, this evidence of reciprocal trade is a pointer to direct contact. Mycenaean sherds found on a number of sites, mostly coastal, in Palestine mark, possibly, ports of call on the route of Mycenaean ships bound for Egypt; or Ugarit may have been a mart of exchange for Egyptian and Aegaeon goods. One of the LH II vases of Egyptian provenance was found at Thebes; a cup and sherds only very slightly later were found there in the palace of Amenhotep III.³ His son and successor, Amenhotep IV, better known as Akhenaton, the heretic king, shifted the royal residence northwards from Thebes to Tell-el-Amarna. The chronology of these years is extraordinarily baffling, but the margin of possible error is not very great. The occupation of Tell-el-Amarna is variously given as running from c. 1386 to c. 1367 or from c. 1375 to c. 1350,⁴ all these dates being approximate. The considerable quantity of LH III pottery found on this site⁵ mostly of Rhodian and Cypriot types suggests the possibility of a small commercial Mycenaean settlement. In Egypt as in Ugarit the settlers must have lived under alien authority; but for the moment the land was hospitable to foreigners and must have received many visitors from the Peloponnese and other Mycenaean centres. Apart from possible earlier stragglers, it would in the first quarter or fifteen years of the fourteenth century be possible for Mycenaeans to visit Thebes and see it still at the height of its magnificence; and we may presume that long before that reports of it had reached them, brought back by a few bold adventurers, and also, no doubt, via Crete, awaking curiosity, ambition, and greed. The occupation of Tell-el-Amarna came to an end with or before the death of Akhenaton's

¹ *Klio*, xxxii (1939), p. 157.

² *Ch.T.*, p. 72, no. 32, fig. 28, p. 107; *BCH.*, 1937, pp. 1 ff.

³ *JEA*, xvi (1930), p. 87.

⁴ See Pendlebury, *Tell-el-Amarna*, p. 33.

⁵ Pottery from Tell-el-Amarna and Gurob in the British Museum, *Cat. V.B.M.* 1. i, A 981-99; *Introd.*, p. xli.

successor Tutankhamun, at latest therefore rather before 1340; it lasted at a maximum barely thirty-five years and possibly no more than nineteen. There is also a considerable quantity of Mycenaean pottery from Gurob,¹ where imitations in Egyptian materials of various grades—alabaster, faience, and the coarsest clay—of Mycenaean vase-forms are so frequent as to suggest a Mycenaean settlement, perhaps, as Schachermeyr thinks, of mercenaries, which was ultimately merged in its native surroundings. Possibly a mixed population continued to prefer the forms which it had inherited and gave some vogue to them in Egypt, for stirrup-vases figure in the wall-paintings of the tomb of Ramses III,² at a date when Mycenaean pottery had ceased for some considerable time to be imported at all; already in the thirteenth century the amount is small.

On the other side of the account, objects which belong to the period of the later XVIIIth Dynasty are fairly common in Greece, but there are few, if any, of the second half of the fourteenth century, and there is not one referable to the long reign of Ramses II (1292-1233).³ The disturbed condition of the eastern Mediterranean might by itself account for the decline in trade;⁴ and there is further the probability that before the end of the century Mycenae herself, or one or more of her settlements, were involved in war with Egypt. As is well known, Akaiwasha are mentioned as the allies or mercenaries of the Libyan king Mer'eye on his expedition into the Delta c. 1225, along with Tursha, Shardana, Shakalsha, and Luka. The Luka are universally accepted as Lykians, the Tursha variously regarded as Tursenoi or inhabitants of Tarsus. The Akaiwasha are in all probability Achaeans, whether they come from the Peloponnese, Rhodes, Crete, Cyprus, or all four. Even Ugarit may have sent a contingent (cf. Chap. V, 7, p. 265). The identification, discredited for a while, mainly owing to the great authority of E. Meyer, has been rehabilitated by Schachermeyr;⁵

¹ See Petrie, *Kahun, Gurob and Hawara*, p. 32, and for the foreign element p. 40; Schachermeyr, *Hethiter u. Achäer*, p. 142.

² Finmon, *Die ägypt. myk. Kultur*, pp. 207-9, figs. 201-2; Bessert¹, fig. 363.

³ Pendlebury, *Aegyptiaca, introd.*, p. xviii. Imported raw materials throw little light on the matter. Ivory is abundant and gold, considering its poor chance of survival, fairly frequent, but neither need have been transmitted by Egypt. In Syria the elephant still flourished; and Ugarit, according to the excavators, traded in gold which probably reached her by the desert route from the Gulf of Akaba. The fine ceiling of the side chamber of the tholos tomb at Orchomenos is the stateliest monument of Egyptian influence in Greece, but cannot be precisely dated.

⁴ On the 'Peoples of the Sea' see Hall, *CAH*, ii, ch. xii, especially pp. 281-3.

⁵ The monumental evidence is insufficient to settle the point at issue, viz. whether the Akaiwasha practised circumcision or not. Meyer held that they did, and that it was therefore improbable that they were the Achaeans (*G. d. A. n.* i², pp. 358-9). Schachermeyr in an elaborate discussion has established the inadequacy of Meyer's arguments (*Hethiter und Achäer*, pp. 141 ff.). The number of the Akaiwasha slain is given as 1,213; that of the Tursha as 722, that of the Shakalsha as 200; no other numbers are recorded (Le Febvre, *Annales du Service*, xxvii, 1927, p. 28). His rendering supersedes that of Maspero, made from a squeeze in 1883 and used by Breasted (*Anc. Records*, iii, §§ 506-601 (1906)). Even allowing something for Egyptian exaggeration, the presence of a formidable Achaian contingent is indicated.

the philological problem presented by the termination *-sha* had long before been solved by Hall, who explained it as the Asianic ethnic which appears as *-asa* or *-asi* in Lykian, and in Greek lands as *-assos* in place-names derived from the pre-Hellenic population. Schachermeyr draws the conclusion that the Achaians had become known to the Egyptians before 1400 through the medium of the Cretans, and suggests that they joined the Libyan army by way of Cyrene.¹ It is possible that this place, whose name is also of a type common in pre-Hellenic Greece (Peirene, Cyllene, Mykenai, Athenai, &c.), had been used by the Cretans as a station on their route to Egypt.²

In the absence of positive evidence to the contrary it seems reasonable to accept the identification of the Akaiwasha with the Achaians, and as it is generally held that, whoever they are, they are identical with the Alhiyawā of the Hittite records, the consequences are far-reaching; they do not, however, concern us here. The mention of the Akaiwasha is unique in Egyptian records. They are not mentioned outside the Karnak inscription of Merneptah; they do not form part of the great invading host whose advance on Egypt by way of Syria and the Phoenician coast was stopped by Ramses III before it reached the frontier, as one might have expected them to do if the Achaians of the mainland still had vital interests in the Levant.³ From the archaeological record it has therefore been possible to establish, first, a period lasting from c. 1400 to c. 1340 or rather later, in which Mycenaeans (whom it seems permissible to call Achaians) were freely admitted to Egypt, and carried on a brisk trade far up country; and, secondly, a period lasting till about 1230 in which intercourse is greatly diminished, followed, if we accept the Akaiwasha = Achaian equation, by one of definite hostility. To this period succeeds a dark age, in which the severance of relations is all but absolute. The evidence, of course, does not prove that any Achaian community was formally 'at war' with Egypt, but only that Achaian mercenaries could be hired on a large scale for operations against her. No proto-Geometric or Geometric pottery has been found in Egypt, and only a small number of scarabs and other objects has occurred in proto-Geometric contexts in Cyprus, Rhodes, and Crete, and in Geometric on the mainland, chiefly at Eleusis, at Sparta in the sanctuary of Artemis Orthia, and at Perachora. Nor is there any sudden change on the termination of Assyrian supremacy in Egypt. Such Ionian mercenaries of Psammetichos as returned home must have spread a certain amount of information in their native land; but there is no marked increase in Egyptian objects found on Greek sites until the sixth century.⁴

¹ *Op. cit.*, pp. 142-3; *Etruskische Frühgeschichte*, p. 13.

² See further *infra*, pp. 100-2.

³ It has been proposed to identify one name (Danaan or Danana) with Danai. If this is an allusion to the Greeks, it is the last for many centuries. Whether they are identical with the inhabitants of the land of Danuša mentioned in one of the Amarna letters as a 'land at peace' is unknown, as there is nothing to show the situation of the land in question.

⁴ Thus of rather over 400 objects of the XXVIth Dynasty from Ialysos only 4 belong to

This squares with the date of c. 615-610 at present favoured for the foundation of Naukratis.¹

The relations of the Aegaeon with Egypt therefore in the Mycenaean and the succeeding age follow somewhat the same course as those with Phoenicia. Here, too, it will be found that a genuine tradition of Mycenaean days survives in the narratives of the *Odyssey*; but Egypt itself, like 'Phoinike', has become little more than a name. One town only is mentioned, that which the Greeks, for reasons mysterious to us, named Thebes,²

the reign of Psammetichus I and only one to that of Necho II, who died in 593. The bulk of the majority belong to the first half of the sixth century, only about 40 being perhaps later. The chief mainland sites concerned are Aegina, the Argive Heraion, Sounion, Sparta, and Eleusis. The objects from Aegina are almost exclusively Naukratite; so are many, perhaps most, of those from the Argive Heraion. The 50 objects from Sounion, all of the XXVIth Dynasty, were found in a deposit the other objects in which date to the middle of the sixth century. At Sparta, however, a fair number of scarabs belong to the eighth century, some to the first half; and Eleusis has finds from at least one tomb (Tomb of Ixis), dating to the late eighth century, and others from the earliest Telesterion which belong to the first half of the seventh. See Pendlebury, *Aegyptiaca*, a book whose table of contents and index make specific references unnecessary. For the Rhodian statistics I am indebted to the generosity of the late author, who in 1938 put at my disposal his unpublished catalogues of the Egyptian objects in the museum of Rhodes and of those in the Cyprus museum at Nicosia. Fresh information may be expected from two quarters: from Perachora, where Egyptian objects have been numerous; and from the Heraion at Samos, where it is possible that continuous relations started earlier than elsewhere (see *Perachora*, I, pp. 70-71). The bronze figurine of a cat published in the *Anzeiger* (1937, p. 209, fig. 3) is dated above the middle of the seventh century, and many of the very numerous unpublished finds are said to be no later.

¹ Payne, *Necrocorinthia*, p. 25; R. M. Cook, *JHS*, lvi (1937), pp. 227 ff.

² No-Amin in Egyptian. It is presumably this fact which led Herodotus to state that the name Egypt designated at one time no more than the nome of Thebes (ii. 13), for when Aristotle (*Meteor.* I. 24, 351 b sub fin.) repeats the statement, the only ground which he gives for it is Homer's failure to mention any other city. He goes on to argue that when Egypt is so restricted, the Delta cannot yet have been formed, and that Memphis either did not exist or was not of its subsequent importance. Though he is careful to state that Homer is of recent date πρὸς τὰς τριακτὰς παραβολάς, his argument is valueless unless he believed that the changes in question had not taken place or at least had not been completed till after the heroic age; otherwise we should have heard of Menelaus at Memphis before he reached Thebes. That this was in fact his belief is proved by a couple of scholia on δ. 356: (1) εἰδὼς τοσοῦτος εἶνα κατὰ τοὺς ἡρωικοὺς χρόνους τὰ διδομένα. ἔπειτα ἀπογινώσκου, τοῦ Νεῖλου ἀπερχόμενος τὴν Ἰλίαν εἶδεν; (2) τοσοῦτον γὰρ ἀπὲξ Ναυκράτειας ὁ Φάρος, ὅθι τὰς τῆς Αἰγύπτου τὰ ἐμπόριον ἔτε, ὡς φησὶν Ἀριστοτέλης· μέχρι Ναυκράτειας ἔτε τὸ πέραν τοῦ Νεῖλου τότε. Cf. Pliny, *N.H.* v. 128, Pomp. Mela, ii. 104. This must be something more than a construction placed by later scholars on the passage in the *Meteorologica*, which does not mention Naukratis; it is a deliberately propounded view of the temple about Pharos. It is difficult to see on what ultimate authority other than Homer's Herodotus based his statement about the original application of the term Aiguptos; it cannot depend on Egyptian information, since both names (Θεῖαι and Αἰγυπτos) were given by the Greeks. That of Aiguptos, it is true, is generally held to be of Egyptian origin, adapted by foreigners from an epithet of Memphis (Hikuptah); probably it was given by the Minoans, to whom the Mycenaeans certainly owed their first knowledge of the land. If the proposed derivation is correct, it is an interesting complement to the implied contention of Aristotle that Memphis was the town of all others most likely to be known to foreigners. It is astonishing that the philosopher should have committed himself to such a solution of the geographical difficulty, and he betrays some uneasiness by advancing the coastline of the Delta in the heroic age as far north as Naukratis. Conceivably he took the statement of Herodotus in ii. 179 (ἢ δὲ τὰ παλαιὰ μὲν Ναυκράτης ἑστῆκεν) to refer to a remote antiquity. Herodotus, on whose demonstration of the alluvial character of the Delta the whole argument rests, had

to which in the eighth century they had for several hundreds of years been strangers, and which, when it once more lay open to them in the seventh, had been stripped of that fabulous wealth whose fame still lives in the *Odyssey*.¹ Plainly the name of Thebes has survived because the visitors who in its great days flocked thither from the Aegæan and the Levant had spread abroad the fame of its almost incredible splendour; of its situation and appearance the poet knows nothing.

There is more substance in the traditions enshrined in the *Odyssey* of Egypt's relations with the Mycenaean and post-Mycenaean world; the narratives, told by various characters in the story, reflect periods of friendship, of hostility, and of ignorance. Ignorance is most clearly betrayed in the mistake about the distance of Pharos from the coast; actually well under a mile, it is represented as being a day's sail with a good wind. This is the only natural interpretation of the text, and that the ancients so read it is proved by their attempts to justify the assertion.² A touch of reality is preserved in the statement that the island offers good harbourage and a water-supply; but what reader of Homer could suspect that the mainland is plainly visible from the island and that the water-supply—the Mareotic lake—is situated on it? Surely we are here in faery lands forlorn, listening to a poet who knows no more of the actual Pharos than of the actual Thebes. Homer, however, knows also of a period when Achaian heroes raided the Egyptian coast and makes Odysseus describe such an adventure in a couple of narratives (§ 246 ff., p 424 ff.) of which the

a swinder if still inadequate idea of geological time; we may infer from ii. 31 that he estimated some thousands of years as necessary for the formation of the Delta. Moreover, he had other proofs of its antiquity in extant monuments, and in particular of the temple of Herakles in which the servants of Alexandros took refuge. Aristotle, who had not visited Egypt, probably did not realise that monumental evidence might be adduced against him; he had, moreover, a poor opinion of *Ἡρόδοτος ὁ παθολόγος* (*de Gen. An.* iii. 5. 755 b).

¹ § 126-7.

² Hence it is impossible to accept Victor Bérard's ingenious solution (*Pénélope et les Barons des Iles, Les Navigations d'Ulysse*, ii, pp. 383 ff.), based on Skylax 107, that Pharos is said to be a day's sail from Egypt because it is in fact 150 stades from the mouth of the Canobic branch of the Nile, which forms, according to Skylax, the western boundary of the land. The view that Egypt did not extend beyond the Delta either to east or west is controverted by Herodotus (ii. 15); there is no reason to suppose it earlier than Hecataeus, who is doubtless the principal object of Herodotus' polemic, and in the great days of Egypt it would certainly not have been applicable. Nor do 150 stades represent anything like a full day's sail under favourable conditions. The distance is roughly equivalent to 17½ miles or 28 kilometres; M. Bérard (*op. cit.*, p. 387) estimates the speed of an ancient ship with a fair wind at 6 or 7 kilometres an hour, which would give something under 5 hours as the maximum time required. Even supposing Bérard's view to be correct, the date implied is that of the dark period which we are considering, for only within it could the Libyans have been allowed to push their frontier as far eastwards as the Canobic branch of the Nile. The supreme importance of Pharos to the Phoenicians after the development of their interests in the west Mediterranean is vividly depicted by Bérard (*op. cit.* ii. pp. 447 ff.); it was the only port between Juffa and Patmetonium (Diod. Sic. i. 31) and therefore an indispensable stage on the voyage to Carthage by that route. Hence Bérard holds that the Proteus story, Egyptian in origin, reached the Greeks through the Phoenicians. Pharos, however, was also of vital interest to voyagers between Egypt and Crete, and must have been known to the Minoans long before the Phoenicians were heard of in these waters.

parts dealing with the raid are identical. An expedition directed to Egypt as a known, even a familiar, destination is undertaken for purposes of plunder, and in the longer narrative of ξ the point of departure (which is not stated in ρ) is Crete; a suitable wind is given and a plausible time for the run in favourable conditions, the adventurers arriving on the fifth day. Apart from the women and children who are to be carried off into slavery, the only booty contemplated is the produce of the fields, which suggests not only that Greece knew of the *περικυλλέες ἀγροί* of Egypt as a perennial source of supply, but that, since she had to resort to such means to provision herself, she was straitened for food at home. This is precisely what on other grounds we should suspect to be the case. In the fourteenth century the Peloponnese at least must have been supporting a population much greater than its home-grown food could maintain. Not only do the gigantic fortifications of Mycenae and Tiryns, the roads for wheeled traffic which radiate from the capital equipped with bridges and culverts, and the stately tholos tombs testify to a very large supply of labour available for ends not directly remunerative or not remunerative at all; there are numerous minor sites, including the flourishing settlements of Korakou, Zygyouries, and Malthi, and a widespread superficial distribution of LH III sherds which suggests an indefinite number still awaiting excavation. In the thirteenth century the area of the distribution of LH III ware abroad suddenly shrinks. The falling off of exports to Egypt has been already mentioned, and the disappearance from Greece of Egyptian imports; in Cyprus true Mycenaean ware fades out and is replaced by an imitative local fabric restricted in its shapes and using a much inferior glaze. It is clear that Greece had lost much if not the whole of her trade with the eastern Mediterranean; she could no longer pay for the corn which in the fourteenth century must have been one of her principal imports from Egypt. The Pharaoh Merneptah (the opponent of the Libyan king Mer'eye), celebrating in a speech addressed to his court his victory over the Libyans and their allies—Akaiwasha, Tursha, and the rest—gives the Egyptian side of the matter. 'They have repeatedly penetrated the fields of Egypt to the great river; they have halted, they have spent whole days and months. . . . They spend their time fighting, going about the land to fill their bodies daily. They come to the land of Egypt to seek the necessities of their mouths.'¹ Odysseus, speaking in a different context² of the compelling power of hunger, 'by reason whereof well-benched ships are equipped and bring hurt to foemen over the barren sea', testifies to the pinch of famine acutely felt in Greece. To return to the narrative of the raid: the Egyptians, who are in the event victorious, slay some of Odysseus' party and take the rest prisoner, *σφίσιον ἐργάζεσθαι ἀνάγκη*, as was in fact their practice, contrasting with that of the Achaeans, who, if they did not kill, held prisoners to ransom. Many of the great buildings of Thebes

¹ Breasted, *Ancient Records*, iv, 580, p. 243.

² ρ 288-9.

were raised by the labour of foreign captives, mainly Asiatic; Minoan and Mycenaean visitors may have seen them at their toil. Odysseus, left solitary, surrenders at discretion to the Egyptian king. His subsequent prosperous sojourn in Egypt is highly improbable in the period of the sea-raids, but finds a parallel about the end of the fourteenth century at Gurob. Here Yunen-Tursha, certainly a compatriot of the Tursha allies of Libya against Merneptah since his name has the same determinatives of land and race, was Deputy Director of the (royal) Harim in the Fayûm, perhaps under Sethos I, and finally enjoyed that funeral of Egyptian style and pomp to which we owe our acquaintance with him.¹ It may be doubted whether after 1225 even the personality of Odysseus could have achieved such a result; but epic is not tied to chronology, and may produce in imaginary combinations traits which have passed into the tradition at various dates. On the whole the narrative of Odysseus is sea-raid saga, such as would naturally arise in the latter part of the thirteenth and in the early twelfth century.

The experiences of Menelaos come to us in a peculiarly dispersed and fragmentary form, first from the lips of Nestor, then from his own, and finally from allusions in the poet's account of what happens at his court.² The introduction of this subsidiary nostos is forced on the poet by a chronological necessity. The framework of the *Oresteia* is already accepted saga, as repeated allusions in the *Odyssey* show, and the movements of Menelaos must conform to the conditions it imposes. Orestes must be too young to count as dangerous when Agamemnon is murdered, and when he is old enough to play the avenger, he must face his ordeal alone; Menelaos must therefore be absent and his whereabouts unknown. The natural way

¹ Pettie, *Kahun, Gurob and Hawara*, ch. v, pl. xix; Schuchermeyer, *Ép. Frâhlg.*, pp. 222 and 226.

² Hall (*CAH*, iii, pp. 291-2) ascribes the narrative of Odysseus to the beginning of the eighth century at earliest on the ground that the *βασιλεὺς* involved cannot be the Pharaoh, who could not have been on the spot so promptly, but must be one of the Delta kings who flourished at that date. Surely this is to read too much into the term *βασιλεὺς* which an Achaean would apply to any one in command of a considerable body of troops. Nor can his assumption of trade at the same date be maintained. 'Traders and pirates', he says, 'were more or less one'; but this is impossible. Even Polyphemus knew that the occupations are mutually exclusive, at least in one and the same area. Natives take to flight when they see Viking ships on the horizon, and the raider's trading is done at home or in some other market, when he has made off with his spoils. There is at present no evidence of trade between Greece and Egypt in the eighth century. Only one Geometric sherd has been found in Egypt—on the site of Naukratis, where it is presumably a stray from an 'heirloom'; in any case it is hardly earlier than 700 (*JHS*, xlv, 1924, p. 184, fig. 6); and the paucity of Egyptian objects in Geometric Greece tells in some degree against the hypothesis. The question might be decided if more sites of an ancient settlement in the Delta could be excavated; at present chiefly sanctuaries and tombs are known. Naukratis, as we have seen, can hardly have been founded earlier than 615 and only a few of the Greek finds from Defenneh go back so far. If, however, the abundant scarabs from the temple of Hera Limenia are in truth Egyptian and not imitations produced in Phoenicia or elsewhere, then we must admit that there is a case for a regular traffic between Greece and Egypt. On the other hand, it might be possible to buy genuine Egyptian scarabs in Cyprus, which we know to have been visited by Greek ships.

to contrive his absence was to provide him with a *nostos* which must be protracted and difficult, but never such as to compete in interest with the adventures of Odysseus; and yet it must not be dull. It is clear that straightforward, continuous narrative will not do. The problem is solved with the consummate skill characteristic of the author of the *Odyssey*. Inevitably he draws on the same body of ancient tradition, but includes elements which do not appear in the sham tales of Odysseus, who, except at the court of Phaeacia, belongs to the realist school of fiction. The opening is given by Nestor with a remarkable amount of detail. After a delay at Sounion due to the death of his helmsman,¹ Menelaos proceeds southward, making for his Laconian port. As they seek to round Maleia, a violent tempest sweeps his ships away to the south-east, and they run along under the south coast of Crete. Here they find themselves at the mercy of the Notos, by which name the south-west as well as the south wind is known, and a number of ships are dashed on the rocks at a point which is indicated with remarkable precision. It lies in Cydonian territory, on the outskirts of the land belonging to the city of Gortyn. Phaistos, Gortyn's neighbour to the east, is also mentioned. There can be little doubt that the port indicated is Komó, the port through which trade to and from Egypt passed in the Bronze Age and which was superseded by Hierapytna or Hiera Petra, near the east end of the south coast.² Surely these unusually precise indications should lead up to something of importance in the story, but all we are told is that, though the ships were destroyed, the crews escaped. The fortunes of Menelaos are sketchily outlined; wind and water carry him with his five remaining ships straight to Egypt. There he wanders with his ships among men of alien speech, gathering much substance and gold (*πολὺν βίοντα καὶ χρυσὸν ἀγείρων*). Nestor then turns to Mycenae—for all this has merely answered the secondary question *ποῦ Μενέλαος ἔην*;—and tells of the seven years' reign of Aigisthos in Mycenae, and of the return of Menelaos in the eighth, too late indeed for the fray, but just in time for the feast. Then he concludes with an exhortation to Telemachos to visit the hero who has

¹ γ 278. The story that the helmsman was buried not at Sounion but at Canobus appears first in Strabo 801 and after him in the Elder Pliny (*NH.* v. 128) and Tacitus (*Ann.* ii. 60). It involves rechristening Phrontis Onetorides by the name of Canobus. Obviously it rests on no ancient authority. The name of the nome adjacent to the Canobic canal on the right bank is Menelaïtes, so called after the brother of Ptolemy I. Strabo is contemptuous of those who think that it has anything to do with the Homeric hero, but it seems to have given birth to the story of his helmsman, which Strabo accepts.

² See *P. of M.* ii, pp. 86 ff.; Pendlebury, *Aegyptiaca*, pp. xviii and xix, and Wainwright, *JHS.* lii (1932), p. 127. There are few harbours on the south coast of Crete. Hierapytna is by reason of its situation the most natural port to serve trade with Egypt. The circumstance which gave Komó its preference was its position at the terminus of the great road which ran from Knossos southwards across the island. With the end of the Bronze Age and the collapse of its culture this route lost all commercial importance. It is less safe not only than Hierapytna, but than Fair Havena, just round Cape Lithuros to the east and than Phoenix well to the west.

wandered in regions whence no one can expect to return and traversed a sea which not even birds can cross in a year. As no farther point than Egypt has been named or hinted at, this is the language of the dark age; yet Nestor has shown that he knows not only the southerly route from Greece to Egypt, but the strong current which runs from west to east along the north coast of Africa, since by this as well as the wind Menelaos was carried to Egypt. Further, he has a remarkable acquaintance with Crete, which also plays a prominent part in the false yarns of Odysseus. The Cretan lines, irrelevant as they are to the theme, are not an interpolation; they cannot be detached from the context into which they have been woven, and yet they can hardly have been composed for it. Presumably they come from the source (to use an over-formal term) which the poet was using. Heroic poetry of Cretan derivation may well have been current in Ionia, since Crete had co-operated in founding many of the leading cities; doubtless some of it originated in the Sea-raid period. The scene of the shipwreck on the south coast of Crete must be very close to the Minoan port discovered by Sir Arthur Evans on the west side of Cape Lithinos in the Bay of Komó. It may be that the ships attempted to enter that very harbour, which is exposed to the west, under conditions too dangerous. In better weather it would be a natural place of rendezvous for Achaian ships from the mainland, from Rhodes, and from Crete herself when a king of Libya sent out a call for mercenaries.

Nestor's cursory sketch of the doings of Menelaos would cover the career of a sea-raider, though the use of the word *ἀγείρων* to denote the collection of portable property is non-committal and discreet, applicable alike to raiding, trading, and to the paying of lucrative visits. The poet has not forgotten that he has to make a place in the story for Helen. Meanwhile we wait with curiosity to hear what Menelaos himself will say: *πολὸν βίωτον συναγείρων ἡλώμεν*.¹ He describes his activities by the same discreet word, but the geographical data he supplies strongly suggest that the poet has turned to a new source. Direct contradiction of Nestor's account is naturally avoided; but there is no mention of Crete, and the line with which he opens the tale of his wanderings—*Κύπρον Φοινίκην τε καὶ Αἰγυπτίους ἐπαλθεῖς*²—suggests a poem in which the hero took not the southerly route to Egypt natural to a Cretan, but that more northerly and circuitous course appropriate to Achaeans who had their outposts planted in Rhodes, Cyprus, and Syria, and who traded with the Phoenician ports. It is the route followed to-day by the Greek steamers which ply between Alexandria and the Piraeus; like Menelaos, they did not in pre-war years touch at Rhodes. So far all is in order. Then come the Aithiopes, the oddly situated Sidonians, and the wholly unknown Eremboi. The poet has left the world

¹ δ 90-1.

² δ 83. The fact that 81 also ends with the word *ἐπαλθεῖς* suggests that the poet is not composing with a completely free hand.

of reality and entered that region of romance which a poet who knows his business can always evoke by a happy use of proper names. Nowhere else in Homer are the Aithiopes said to receive human visitors and, as Lehrs long ago pointed out,¹ the statement made in another context that they live both in the east and the west has no topographical value. People get their faces sunburnt if they live where the sun comes very near the earth, as it does when it rises and also when it sets. The position of the Sidonians is at first sight surprising, for in two passages Homer clearly implies that Sidon is a town in Phoenicia.² In none of his other references to them, however, does he suggest that they are Phoenicians or give any hint that he knows where Sidon is.

Proper names may survive when all knowledge concerning them has perished, but the knowledge was once there, and sometimes an odd, stray, isolated fact floats down to us on the stream of tradition. The mention in the *Iliad* of the pygmies, who were put on the map not much more than half a century ago, shows how rumours of lands far beyond the utmost range of their exploration might filter through to the Greeks. Whether they first heard of the pygmies in the period of Mycenaean expansion or not until that of renewed contact with Egypt there is nothing to show. The Aithiopes, however, we have found in what looks like Bronze Age company; and at any subsequent date until the conquest of Alexander the Greeks were generally less favourably placed than in the fourteenth century for hearing of regions in the extreme south. That the Eremboi were a real people is hardly open to doubt, though the hope of identifying them is small; the position in the line of the Sidonians shows that the order of the names has no topographical significance. The three peoples are there to account for the length of Menelaos' absence, and perhaps also to invest with an atmosphere of high adventure the not very impressive figure of Helen's husband.

It seems certain that the poet was familiar with a body of sea-raid saga and probable that he also knew something of an older tradition, fragmentary no doubt and vague, respecting the period of Mycenaean colonization and trade. The main evidence for this is to be found in the story of Eumaios, which does not concern Egypt; but the next instalment of the nostos of Menelaos adds a priceless item by the mention of Egyptian Thebes, unique in the *Odyssey* and recurring in the *Iliad* only by interpolation. The introduction of the great name, once surely as magical in Achaian ears as Micklegard in the Vikings', certainly the crowning glory of all the travels of Menelaos, is dexterously contrived. Menelaos has concluded his speech with the statement made almost in so many words that for all his present prosperity he does not think that the War of Troy was worth while. Then comes Helen's famous entrance, staged with every circumstance of dignity and romance, only one of which concerns us here.

¹ *De Aristarchi Studiis Homericis*³, p. 419.

² + 285, + 425.

Among the costly objects which go to form her setting is a silver basket which she received as a gift at Thebes, where the houses have greatest store of wealth, and then follows a list, not wholly appropriate in its actual context, of other gifts received there, some by Helen, some by Menelaos, as though the poet were deliberately lingering on the theme and seizing an opportunity to put as much as possible on record. Actually he does much more than this. The sea-raid atmosphere is dissipated; Helen, who could find no possible place in a tale of that type, and Menelaos have spent their time royally on a round of visits, collecting presents from their hosts. This is in the epic tradition of *ξενίφια*: Menelaos was no doubt able to make some return out of the spoils of Troy. His character as neither trader nor pirate, but a real king suitable for a rôle in epic, is now established. If we ask whether his experiences in Thebes are pure invention attached to a romantic name or whether they have some counterpart in reality, we come back once more to that brief span, ending in the first half of the fourteenth century, in which Achaians could without doubt have freely visited Thebes.¹ It was in those years that Amenophis III built a great mortuary temple whose floors and portals were covered with silver and gold, the city's crowning ornament. Cretan embassies in the fifteenth century saw a spectacle magnificent enough—the obelisks of Hatshepsut, their tops electrum-plated, the buildings, now vanished, of Amenhotep II, and many of those great temple pylons which may have started the legend of hundred-gated Thebes. They would also doubtless bring back complimentary gifts, and of all this some rumour would reach the Achaians on the mainland even if none made the journey. None the less, it is Amenophis III who is a peculiarly lavish dispenser of gifts at home and abroad, the object also of much foreign importunity. On the whole it seems probable that the tradition which six centuries later has not wholly faded out of epic is based on the direct experience of twenty-five years, though Cretan saga transported to Ionia may have perpetuated Minoan memories as well.

One curious circumstance may rest on authentic tradition. Elsewhere Homeric heroes are the guests of kings. Odysseus, who in his sham yarns is no more than a very slightly romanticized Archilochos and is perfectly familiar with low life, is never entertained by lesser men; and Menelaos himself had stayed in the house of the king of Sidon.² Polybos and Alkandre, from whom Menelaos and Helen receive their gifts and who are doubtless their host and hostess, are not the king and queen of Thebes.³ In actual fact the official responsible for the reception of tribute-bringing embassies and doubtless for providing them with entertainments and complimentary

¹ Now that direct trade between Mycenaean Greece and Egypt in the sixteenth and fifteenth centuries is established (*supra*, p. 14) the possibility of earlier visits must be taken into account. He is entertained by the king of Thesprotia (ℓ 316) as well as by Alkinoos.

² *o* 117-18.

³ Similarly Thon, another Egyptian host of Menelaos from whose wife Polydamna Helen received the drug of forgetfulness, is not described as a king (8 228 ff.).

gifts was the great vizier of the south, the head of the whole financial administration of Egypt. The Achaian embassies which after the fall of Knossos probably took the place of those from Crete must have learned that they had no more chance of speaking face to face with the Pharaoh than with Zeus himself; they may not even have dealt with the vizier in person. This is no position for a Homeric hero, but Homer does not tamper with the tradition. It is possible that certain apparently Egyptian features in the palace of the fairy-tale king Alkinoos are ultimately derived from the legend of fourteenth-century Thebes. Such are the metal-plated walls, doors, and doorways of his palace then actually existent in the temple of Amenophis III; the guardian dogs of Hephaistos, ranged in double line, may have their origin in the avenues of sphinxes and rams laid out at Thebes by the same Pharaoh; and if there is no very close parallel for the golden torch-bearers, it was probably in Egypt (unless time has deprived us of wooden statuary in Crete) that the Achaians first saw life-size or colossal sculpture in the round.

Be this as it may, any later date than the first quarter of the fourteenth century for the origin of this allusion to Thebes is, to say the least of it, extremely improbable. In the second quarter Amenophis IV, the heretic king, had his court at El Amarna and was doubtless responsible for the Mycenaean settlement there; in the reaction which followed his death foreign visitors would not be encouraged at Thebes. Later came the period of the sea-raids, and then the virtual isolation of the Greeks in the proto-Geometric and the early Geometric age. When they once more visited the interior of Egypt, Thebes had already been sacked (in 663) by Assurbani-pal, who besides carrying off gold, silver, precious stones, and much else, took two high obelisks of shining orichalcum 2,500 talents in weight, the door-posts of the temple door, from their base and removed them to Assyria. After this experience, Thebes can hardly have been remarkable for her wealth.

As might be expected, only the vaguest memory survives of Thebes in her great days under the XVIIIth Dynasty. Nothing but her fabulous wealth and perhaps her bounty to minor foreign potentates is known to the poet of the *Odyssey*—little enough, but so far as it goes, in accordance with the recorded facts of history. That the allusion to Egyptian Thebes in *Iliad* IX (382-4)¹ is the work of a later hand seems certain, for Thebes coupled with Orchomenos can have referred originally only to Boeotian Thebes. The addition after 381 (οὐδ' οὐ' ἐς Ὀρχομενὸν ποτιπλάτεται οὐδ' οὐα Θήβας) of the line from the *Odyssey* (Αἰγυπτίας, ὅθι πλεῖστα δόμοις ἐν κτήματα κείται) obscures though it does not obliterate a precious fragment of Bronze Age tradition, handed down from the days when Orchomenos and Thebes were powerful, perhaps rival kingdoms in the region which

¹ The explanation of Scholl. BT that the poet selected the cities which were classic examples of wealth in Europe and Asia respectively is obviously wide of the mark.

was afterwards Boeotia, a state of affairs to which the archaeological record of the two sites bears witness. The line from the *Odyssey*, however, serves the interpolator merely as a peg on which to hang two more of his own (383-4) emphasizing the military strength of Thebes, an irrelevant topic, since Achilles is speaking only in terms of wealth and his rising fury would hardly spare time for even a passing comment on other aspects of Thebes. The interpolator has the tact to be brief, and the insertion, though rather more incongruous with the emotional tension of the context, is perhaps less noticeable than the unexpected digression of Menelaos on pastoral life in Libya. The information conveyed in these two lines, however, is false; Thebes never was a fortified city nor the military headquarters of Egypt. Alexandrian scholars doubtless realized the first incongruity, for according to Diodorus Siculus¹ some ancient scholars had qualms about the hundred gates and suggested that they were in fact the great pylons which are so impressive a feature of the temple architecture of Egypt. This is in fact the only plausible explanation forthcoming of the legend, which might arise from travellers' tales misunderstood, such tales as the Ionian mercenaries of Psammetichos might tell on their return. Behind the statement that through each of the gates 200 chariots went out to war may lurk a more specific though equally untrustworthy authority. Every foreigner who reached Thebes, no matter at what period, would visit the great temple of Amun under the conduct of one of the priests, and would probably listen to his rendering of some of the hieroglyphic inscriptions recorded on its walls and gateways. Strabo and Aelius Gallus,² Germanicus and his staff,³ stood before the monuments and listened to accounts of the greatness of the ancient Egyptian empire (which lost nothing in translation) and its military resources. One statement made to Germanicus is especially noteworthy, viz. that in the days of Ramses (i.e. II) the population of Thebes included 700,000 men of military age, whom Ramses led out thence to war. While the accompanying list of the tribute imposed by Egypt on the nations she conquered seems to be translated with tolerable accuracy (except in the matter of place-names) from tribute-lists of Thothmes III still extant on the walls of the great temple of Amon, the inscriptions in the same temple which record the triumph of Ramses II at Kadesh afford no foundation for the statement about the army of Thebes. Yet as Maspero⁴ pointed out, the use by Tacitus, our authority for the visit of Germanicus, of the name Ramses and not Sesostris shows that his source contained information received on the spot and not copied out of some Greek handbook. Thus did the Theban priests of Roman and doubtless Ptolemaic Egypt console themselves for

¹ I. 45. 7.² Strabo 816.³ Tac. *Ann.* ii. 60.⁴ *Ap.* G. Boissier, *Tacite*, p. 11, n. 1. Cf. *CAH.* ii, pp. 223-4. The statement to Germanicus of the military resources of Egypt seems to be based on a passage in the Hymn of Victory celebrating Kadesh in which Ramses is made to say that he prefers the protection of Amon to millions of soldiers and tens of thousands of young men.

their country's fallen estate. In the seventh century the situation was not very different. The fantastically wealthy city had been despoiled of her treasures, and if the yoke of the foreigner had at last been shaken off, this had not been done without foreign assistance. The priests of Amun were then much what they were six or seven centuries later; Ionians and Carians stood before the same inscriptions and listened to the same accounts of the past greatness and military strength of Thebes.

One or two elements in the nostos of Menelaos still call for examination. When Helen casts into the wine the drug of forgetfulness,¹ thus banishing sorrow from the feast, her mere presence is enough to show that the episode is of the poet's own invention; Helen has no place in the tale of a sea-raid. Further, there is no single trait in it which there is reason to suppose borrowed from an ancient source. It is true that Egypt was in all ages famous as a land of drugs, and conceivable that her reputation in this matter came down from the Bronze Age; but it could probably be learned by any sailor who touched at a Delta port. Here and only here we encounter a personal name—that of Thon—which, though no equivalent is known, is possibly Egyptian; it is at least not Greek. Egyptian names were coming to the knowledge of the Greeks before the end of the eighth century. The earliest of which Greek historical record preserved the memory were those of Tephnaethos and his son Bocchoris² (Tephnakhthe and Uakere), whose precise dates are uncertain, but whose careers fall within the last third of the eighth century.³

Other indications of Egyptian contacts are few and not very informative. The old Ithakesian Aiguptios⁴ may have got his name because his mother was an Egyptian carried off in a raid, or because his father wished to commemorate some friendly relation with Egypt, or perhaps, as Bérard suggests, because he himself had made the voyage. There is more interest in the vague notion of embalming conveyed in *T* 38–9, where Thetis is said to preserve the corpse of Patroklos by pouring in nectar and ambrosia through the nostrils. Thus, as Herodotus⁵ tells us, the Egyptian embalmer when practising his art in its most expensive form introduced his preservatives within the cranium, having previously extracted the brain, partly with a hook and partly by means of solvents.⁶

One feature unites all the Homeric allusions to Egypt in a tradition which, however wide its chronological limits, is distinct from that of

¹ *S* 219 ff.

² Diod. Sic. I. 45.

³ Sargon's allusion to a Pharaoh of Egypt in 715 (Luckenbill, *Ancient Records*, II, p. 7, § 18) must be to Bocchoris; it shows that Egypt was then independent of Ethiopia. For a discussion of the rival datings of the reign of Bocchoris (720–715, Wiedemann and Meyer; 721–715, Petrie; 718–712, Breasted) see a note contributed by Professor Battiscombe Gunn to E. Doherty's *Italic Tomb-groups*, p. 106.

⁴ *B* 15.

⁵ II. 86.

⁶ The Homeric tradition may have come through Crete, where some amount of Egyptian influence has been detected in the treatment of the dead. The swathed figure of the dead man on the Hagia Triadha sarcophagus is commonly taken to represent a mummy. The gold masks of the Shaft-graves must also be borne in mind, *v. supra*, p. 20, n. 4.

subsequent literature; the Nile appears throughout as *ὁ Αἴγυπτος*,¹ which must have been the Achaian and presumably the Minoan name for it. The name Neilos is not Egyptian; it is of uncertain origin, but probably comes from a Semitic word *nil* which is not a proper name but means 'flood'. If this is the case, the usage probably arose in the period of Assyrian domination, and Greeks may have picked it up from the Phoenicians or in Cyprus. In Greek literature it makes its first appearance in the Catalogue of Rivers in the *Theogony*,² a fact adduced in support of their view by those ancient scholars who held Homer to be earlier than Hesiod.³ As the name is not Egyptian, it throws no light on the resumption of relations by the Greeks; it does perhaps suggest that they were at first indirect. The fact that the new name did not invade the Homeric tradition confirms the conclusion that Homer's knowledge of Egypt is drawn from an ancient tradition which can hardly be other than poetic; that his ignorance is characteristic of his own day; and that the constant recurrence of the theme in the *Odyssey* responds to a new curiosity in his audience aroused by vague rumours and strange tales of lands whose names had not wholly perished out of mind.

LIBYA

The fact that we have found Achaians, Libyans, and Egyptians in contact in the thirteenth century raises the question of the date and source of the lines which describe Libya (δ 85-9). If they are not traditional, they can hardly, in view of the date of the foundation of Cyrene, be earlier than the middle of the seventh century; that they are in their actual position an interpolation appears almost certain. They are even less suited to the pathetic context in which they stand than the lecture on the ethnography of Crete which Odysseus addresses to the impatient Penelope. Menelaos is responding to the naïve admiration of the splendour of his house expressed by Telemachus and the gist of his speech is as follows: 'True, I am prosperous now, but I won my wealth at the cost of much toil and time; hence I was absent when my brother, whom I might have saved if I had been there, was murdered.' The digression on pastoral life in Libya is inopportune, though there is no such danger signal as the use of the Dorian name in the Cretan passage to mark it as an interpolation. All five lines can be removed without injury to the context, and if there were no other mention of Libya in Homer, it would be difficult to defend any of them. Libya, however, also appears in the excellent sea-raid saga of Odysseus (ξ 295 ff.), the final episode of which opens with the suggestion made by the rascally Phoenician partner of a trading voyage to Libya. The name of the Lbw or Rbw is found in Egyptian documents of the Bronze Age, occurring for the first time to designate the subjects of Mer'eye or a part of them in

¹ γ 300 (Nestor), δ 477 and 581 (Menelaos), ξ 257-8, ρ 427 (Odysseus).

² Th. 338.

³ Schol. ad δ 477.

the inscriptions in which Merneptah records their defeat. Presumably therefore it was known to the Achaeans of that date, and consequently it is entitled to figure in the sea-raid yarn of Odysseus. It is possible that δ 85 is a Bronze Age tag used by Homer to round off the wanderings of Menelaos and that it served the interpolator as a peg on which to hang his amplification, somewhat after the manner of the interpolator of I 382 ff. in the *Iliad*.¹

What is described, however, is the economy of pastoral life as seen by a traveller or sojourner, not by a trader who does not get beyond the port or beach, and the phenomenon, rare enough in modern as in ancient Greece, of milk all the year round. Was this the sort of information gathered by Delphi before Battus was driven out on his reluctant quest, or is it what Akaiwasha learned from the Libyans in whose company they fought, as Merneptah tells us, for months, or even, possibly, what they saw for themselves if they joined forces with the Libyans in the Cyrenaica? The element of fable in the description favours the latter hypothesis. There is not much of it, for it is not necessary to take either δ 85 or Arist. *Hist. An.* viii. 28 as meaning that lambs are born horned, but only that the horns develop with remarkable rapidity after birth. Three lambings in the space of a year are, however, a physiological impossibility. Two are normal in Greece and Italy, as travellers know and as Virgil (*G.* ii. 130) has stated in the case of the latter country; only in pseudo-Arist. *De Mirab. Ausc.* 80 do we find three ascribed to the βοσκῆματα of the Umbrians, an echo, it would seem, of the Libyan passage in the *Odyssey*.²

The three harvests of Libya which figure prominently in the narrative of Herodotus (iv. 199) find no place in the *Odyssey*, which suggests that in the period there recorded the population was purely pastoral or at least that agriculture played a very small part in their economy. Silphium, growing wild and abundant and feeding both man and beast, would reduce their other needs to a minimum. The three lambings may correspond to the different levels of country occupied by the sheep in the different seasons³ and may have been invented or rather assumed to account for the perennial supply of milk.⁴

There is no mention of silphium in the *Odyssey*,⁵ nor of the hides and

¹ *v. supra*, p. 98.

² The 'mad vine' of Libya (*op. cit.* 161) is possibly a similar echo of η 122-6.

³ According to Theophr. *de Plant.* vi. iii. 6, they were driven into the hill country for the spring and winter.

⁴ The milkless periods of much of the Greek country-side, familiar to travellers, are of course due to the malnutrition from which most Greek livestock suffers and do not occur where herds are maintained, as in the neighbourhood of Athens, on imported feeding-stuffs. The two similes in the *Iliad* which introduce the spring-time milk-supply (B 469 ff. and H 641 ff.) show that the same conditions prevailed in Ionia.

⁵ According to local tradition silphium first appeared seven years before the foundation of Cyrene (Theophr. *de Plantis*, vi. 3. 3, where the foundation date is given as 611-610 as against the better supported 632-631). This may mean that the discovery of the commercial possibilities of the plant led to the founding of the colony; since it was most abundant in the

wool which were the other staple exports of Cyrene, nor of the *ἐλασιππον ἔθνος* which Battus found in possession.¹

If we accept the Bronze Age hypothesis, we must ask whether the alliance with Libya was the first contact of the Achaeans with that region. Evans² has put forward good grounds for the belief that Minoan Crete maintained close relations with Cyrene, a terminus for desert routes from the south-west as well as from the south-east; if such a connexion existed, Mycenae would no doubt fall heir to it. The name, certainly derived from that of the local spring Kura, might well go back to Minoan days, since the place-name termination *-ην* or *-ηνη* is common in Crete³ as well as in mainland Greece, where it belongs to the pre-Hellenic stratum.

Yet a third possibility has been put forward by Malten,⁴ viz. that Cyrene was founded by a band of fugitives from the Peloponnese, expelled by the Dorian invasion; these formed the population found in occupation by Battus and described by Pindar as Antenoridai from Troy. So far the only refugee settlement of this sort or at least appearing to be such is that of Assarlik near Halikarnassus;⁵ further, it is more difficult on this hypothesis to account for the entry of Libya into the epic tradition.

It is to be hoped that excavation may in the future settle the question decisively. Ugarit has prepared us for far-flung Cretan connexions.

neighbourhood of the Syrtis and on the Euhesperidai, its properties might well become known to foreign seafarers. Silphium was well known in Solon's time (Pollux, x. 103 = Bergk⁶, 39, Diehl, 26).

¹ Pind. *P.* v. 111.

² *P. of M.* ii. 756.

³ Fick, *Vorgriechische Ortsnamen*, pp. 35 and 36.

⁴ *Kyrene*, p. 112.

⁵ *v. infra*, pp. 106-7.

CHAPTER III

CREMATION AND IRON

I. CREMATION

IN the ostensibly Bronze Age culture of the epic there are, as we have seen, two anachronistic elements—cremation and the knowledge of iron as a useful metal. The first appearance of iron in this new rôle will be discussed below. As regards cremation, most of the relevant facts will be found in an article published by the present writer in 1933¹ and need not be recapitulated here. There were, however, some omissions;² and there is new material, especially from the Kerameikos, which, though it does not lead to any revolutionary conclusions, amplifies our knowledge considerably. As mentioned above,³ we now know that, so far as we can judge from the data of forty-eight graves, cremation was from almost the beginning of the proto-Geometric period the sole rite practised at Athens. It apparently persisted till a date about, or rather later than, 800, which may be taken as dividing Early from Late Geometric; for this period, until the Geometric material from the Kerameikos is published, we have only the evidence of six cremation graves situated between the Acropolis and the Areopagus⁴ and two excavated by the Americans on the north slope of the Acropolis.⁵ In the latter half of the eighth century cremation was reduced almost to vanishing point. Of the nineteen Dipylon graves examined by Brückner and Pernice⁶ one contained a certain and one a doubtful cremation. Twenty-two graves of the same date contained inhumations only.⁷ So did a group of ten bordering on the Agora.⁸ Outside Athens the decline is only slightly less marked. In a Late Geometric cemetery at Phaleron⁹ there were only two cremations in a total of twenty-one depositions of adults; in a neighbouring area where the graves are not distinguished as Late or Early there were eighteen out of a total of eighty-seven. At Anavysos (Anaphlystos) there was, on the other hand, a large though unspecified number of Late Geometric cremations.¹⁰ At Vranesi in Boeotia¹¹ there were many Late Geometric cremations as well

¹ *JHS*, liii (1933), pp. 161 ff.

² A cremation at Tyllissos in Crete is shown by the presence of arched fibulae to belong to the sub-Mycenaean period (speaking in terms of mainland chronology) or the proto-Geometric and not to LH III. The tomb is discussed by Marinatos (*AM*, lvi, 1931, pp. 112 ff.). The cremations of Leucas, authentic if not very thorough, and dating to the middle of the second millennium or rather earlier, have no bearing on the appearance of cremation in the Aegean area 500 years later. See Dörpfeld, *Alt-Ithaka*, i, pp. 210 ff. and 220 ff., and Wiesner, *Grab und Jenseits*, p. 24, no. 19, and p. 111.

³ p. 43.

⁴ *BP&W*, 1898, p. 318.

⁵ *AA.*, 1932, p. 115.

⁶ *AM*, xviii (1893), pp. 220 (Gr. III), 152 (Gr. XV), and 148.

⁷ *AA.*, 1937, p. 199.

⁸ *Hesperia*, Suppl. II, pp. 13-14. The inference is fairly safe, though in two cases evidence was lacking.

⁹ *Eph. Arch.*, 1911, p. 246; *Deltion*, ii (1916), pp. 17, 18.

¹⁰ *Praktika*, 1911, pp. 113-14.

¹¹ *AM*, xxx (1905), p. 132.

as inhumations, and in a Geometric cemetery at Eretria¹ all adults were cremated, but whether the graves belonged to the Early or the Late Geometric period is not stated. At Eleusis in the Geometric part of the cemetery there were twenty-nine cremations against eighty-six burials.²

To the rule that cremation was not practised in Mycenaean times the excavation of Prosymna in the Argolid has produced one curious exception. A crushed jar containing burnt human bones was found among the lowest and undisturbed courses of the blocking wall of a LH III chamber-tomb; the cremation is therefore ostensibly at least Mycenaean.³ It is perhaps conceivable that the family to whom the tomb belonged turned to the new practice in the first sub-Mycenaean generation, or possibly had received the ashes of one who had died abroad, and shrank from the elaborate ceremonial of opening and fumigating the tomb merely to admit a handful of ashes, yet were equally reluctant to exclude the dead man from the house of his ancestors and devised the compromise of taking down a large part of the wall in order to lay his ashes on the threshold. The instance is in any case of interest not only as being the only well-attested example of Mycenaean cremation, but as occurring in a region which later rejected the rite altogether.⁴ There was not a single example of cremation in the fourteen proto-Geometric depositions of adults excavated at Asine,⁵ nor in the forty-one Early Geometric graves opened by the Germans in the neighbourhood of Tiryns.⁶ Owing to the smallness of their number the seven Geometric inhumations recently found at Berbati near Mycenae,⁷ the two previously known from Mycenae, and another two from Trozen⁸ are of less importance, but the unanimity of their evidence points to the same conclusion. The Geometric graves excavated by the Americans at Corinth contained inhumations only;⁹ the number is not stated.

It is a matter of interest and importance in relation to the history of Greek epic that the earliest and most abundant examples of cremation on the mainland are found in the region whence a very considerable stream

¹ *Eph. Arch.*, 1903, pp. 3-7. ² F. Poulsen, *Die Dipylongräber und die Dipylonvasen*, p. 25.

³ Blegen, *Prosymna*, pp. 243 and 242; cf. 230-1.

⁴ It somewhat enhances the probability of a few alleged Mycenaean instances recorded by earlier excavators (*JHS.*, *op. cit.*, pp. 163-4); but since Grinary ware is found on both sides of the line which divides LH III from sub-Mycenaean, to establish a genuine LH III date will not be easy.

⁵ Frödin and Persson, *Asine*, pp. 422 ff. The 14 graves and a much larger number of infant burials were found among, though not demonstrably within, the houses. Presumably the main cemetery for adults was elsewhere. Of the Geometric cemetery only one grave has been excavated and the evidence it affords is ambiguous; *op. cit.*, pp. 192-3.

⁶ *Tiryns*, i, pp. 127 ff.

⁷ *JHS.*, lvi (1926), p. 245.

⁸ *Tiryns*, i, p. 134. The relics of a Geometric cemetery near the tomb of Clytemnestra at Mycenae contained unmistakable inhumation graves and some not wholly satisfactory evidence of a cremation (*Eph. Arch.*, 1912, pp. 127 ff.).

⁹ *AJA.*, xxxiv (1930), pp. 439 ff. At Syracuse, however, cremations occurred in the eighth- and seventh-century graves in the proportion of about 7 per cent. (*Not. d. Sc.*, 1896, p. 111).

of emigrants (to put it no higher) must have crossed to Ionia, and it is doubtless owing to this fact that the Geometric cemetery of Colophon contains unmixed cremation deposits of a period in which Attica had already begun to abandon the rite unless indeed they all fall within the period of Early Geometric, in which case the foundation date of Colophon presumably falls before c. 800. The colonists must have been largely nobles, the most mobile class and the most likely to furnish leaders of adventure. Such men would carry what had become their ancestral custom with them and with the conservatism always to be found in some features of colonial life maintain it in their new homes, with the additional reason that they were now in alien lands and open to attacks in which their tombs might be violated. Incidentally, their withdrawal would weaken the supporters of cremation at home and so promote its decline.¹

If we ask why cremation should have made its first appearance in Attica and that suddenly and universally, the complete answer of course evades us. A principal cause, however, is certainly to be found in the break-up of Achaian society consequent on the Dorian invasion and the shiftings of population to which it gave rise. The account which Thucydides gives of the refugees who flocked to Attica is borne out by the rapid growth of the population of Athens, deduced by Kraiker from the extremely large quantities of proto-Geometric pottery found in the Kera-meikos and the Agora.² These men, ousted from their homes and finding a refuge, temporary or permanent, in an alien community, could not protect the tombs of their ancestors and might well prefer for themselves the form of sepulture which would afford least satisfaction to a victorious foe. The generation which witnessed the fall of Mycenae had probably seen the tholoi despoiled and the bones of the Kings of Men cast forth.

The old view that the Dorians brought cremation into Greece was never anything more than a guess and the progress of excavation has shown it to be devoid of foundation. Cremation apparently exercised a strong attraction on those Dorians who spread to Crete, Thera, and the Dodecanese; it looks as if they first met it in Crete³ and were responsible for its diffusion and dominance in the other islands. There is some definite evidence for this in the case of Thera, whose two considerable Geometric cemeteries contain practically nothing but cremation; Cretan vases testify to trade relations, and one form of grave is a miniature rock-cut chamber-tomb, a favourite form on a larger scale in proto-Geometric Crete.⁴ It is true that sub-Mycenaeon, i.e. Achaian, cremations were deposited in five of the chamber-tombs of Ialysos,⁵ but a gap in the occupation of the site occurs

¹ It is improbable that cremation, an expensive form of disposal, was ever universal among the poor.

² Thuc. I. 2. 6; *Keramikos*, I, p. 177.

³ Only in Crete is there a proto-Geometric period; in this cremation appears and spreads; in the succeeding Geometric period it becomes virtually universal. See *JHS*, lxxi (1931), pp. 164-6, and Pendlebury, *The Archaeology of Crete*, pp. 308 and 319.

⁴ *Thera*, II, pp. 83 ff.

⁵ *Anuario*, vi-vii, pp. 117 ff., p. 170.

such as we have already noted at Colophon and Miletus. The use of the cemetery begins again with Geometric cremations, followed by similar depositions of the seventh century; in the sixth cremation is supplanted by inhumation.¹ In the small seventh-century cemetery of Vroulia cremation is similarly dominant; there are thirty examples as against two inhumations.² In the island of Cos a large Mycenaean cemetery has been excavated in the neighbourhood of the modern town, in which the dead were buried in unlined trench graves, a method strange to the mainland. In the town itself the remains of a Geometric cremation cemetery were discovered.³

In Ionia we have knowledge of one cemetery only, that of Colophon, and that knowledge is sadly incomplete.⁴ One new feature has, however, been established, the association of the tumulus with cremation. One large Geometric tumulus was excavated partially and a number of small ones completely. The large tumulus contained numerous depositions of heavily burned human bones, some in jars, others merely laid in the earth. The smaller tumuli were enclosed each by a ring of stones and contained bones lying on charred logs of wood. Even metallic objects such as fibulae were so damaged by fire that only their type could be distinguished, and the disappearance of the pottery before any adequate study could be made deprives us of the material for establishing a relative chronology. We have, however, learned that though the Ionians undoubtedly brought cremation with them from mainland Greece, they modified their form of sepulture in their new home. Conceivably this was done under native influence, for the tumulus is a characteristic feature of Anatolia and is almost unknown in Greece;⁵ it is, however, at present impossible to establish priority in Anatolia. Of those excavated so far none is earlier than Colophon except those of Assarlik in Caria,⁶ and Assarlik is Greek so far as material culture goes and probably in blood as well. It is true that the tumuli there are not of the Colophon type in that they were erected over built chambers; but for this we have a precedent in the

¹ *AA.*, 1936, p. 158.

² Kinch, *Vroulia*, pp. 49 ff. and 53 ff.

³ *AA.*, 1936, p. 180.

⁴ *AJ.A.*, 1925, p. 67. The excavation was interrupted by the Greco-Turkish war of 1922, in the course of which the museum material was destroyed before it had received more than cursory examination. Besides the Geometric graves a tholos of 'Mycenaean' type containing LH III pottery was excavated.

⁵ There are three of pre-Mycenaean date; probably all are of the Middle Helladic period. They are as follows: (1) At Drachmani (Easteia) in Phocis (*Eph. Arch.*, 1908, pp. 94 ff., and Wace and Thompson, *Prehistoric Thessaly*, p. 204), tumulus with single interment covered with stones. (2) At Aphidna (*AM.* xxi (1896), pp. 385 ff., and *Preh. Thess.*, p. 222), tumulus containing 13 interments distributed among trench and cist graves and a pithos. There was pottery of an unknown type, but showing some affinities with MH ware. (3) On the south slope of the Acropolis at Athens (*Eph. Arch.*, 1902, p. 123; H. Gropengiesser, *Die Gräber von Attika*, p. 1), remains of tumulus containing two skeletons at ground level and four at a higher level. It will be noted that all three sites are easily accessible from the sea and may represent the intrusion of an alien culture. The last-named example is probably that which the Athenians held to be the tomb of Hippolytus; see Pauz. i. 22. 1.

⁶ *JHS.* viii, pp. 64 ff.; cf. xvi, pp. 203-4. The tombs belong to the proto-Geometric period.

tumuli which in Messenia and in a less complete degree elsewhere¹ were heaped over tholoi built on level ground or only very partially sunk in a hill-side. The tumuli of Assarlik cannot be directly derived from such mainland models, for the ground-plan of their chambers is rectangular, but they might well be the work of an Achaian refugee colony from Crete, where in the Early Iron Age the small rectangular built chamber is common.² It is possible, indeed probable, though not susceptible of proof, that tumuli once covered the ostothecae of the same site, i.e. enclosures, both circular and rectangular, of stones, within which were found the remains of cremations associated with fragments of terra-cotta larnakes (another Cretan feature) or with cremation urns. If this were so, we should have a good parallel for Colophon and a pointer to the origin of the tumulus in Anatolia.³

Since cremation was not brought into Greece by any invading or intrusive population, the disintegrating Achaian society which adopted it must have found the model abroad, and in that period of restricted communications almost certainly close at hand. There was one cremating community with which Mycenaean Greece had been in close relations, viz. the Sixth City at Troy, which came to an end not later than 1300, probably about 1350. The cemetery of its last phase was discovered by the American excavators in 1934, and was found to contain cremations only.⁴ It is true that only nineteen cremation urns were found *in situ*, but from the very large number of fragments found in the immediate vicinity, it was possible to infer the existence of at least 147 similar receptacles. Achaian visitors must at least have known of the local practice. No part of the cemetery of VII A has yet been found, but as there was no change of culture or population it is reasonable to assume that the inhabitants kept up the practice of cremation. They also maintained relations with Greece, as imported Mycenaean ware and local imitations of it show. If the Achaians conducted or took part in the siege which ended in the sack of VII A, they must have become acquainted with the practice and may well have adopted it themselves as particularly suitable to the conditions of warfare on foreign soil. To introduce it at home on their return would be a different matter, sentiment in such things being notoriously conservative so long as conditions remain unchanged; but when their own society was on the brink of dissolution, they might well recall the practice of the battle-field, the more so since relations with Troy still persisted.⁵

¹ Valmin, *Swedish Messenia Expedition*, p. 207.

² Wiesner, *Grab und Fenselt*, pp. 94 and 99.

³ This is Valmin's view ('Tholos Tombs and Tumuli, *Corolla Archaeologica Gustave Adolphi dedicata*, p. 225 f.), but in assuming Assarlik to supply a direct link with the mainland, he underestimates the importance of the rectangular ground-plan. To establish his case it would be necessary to show that LH III settlers in Anatolia had built tholoi of the Messenian type covered with tumuli, and that the latter were initiated by the natives.

⁴ *AJA*, xxxix (1935), pp. 26 ff.

⁵ The influence of Troy VI may possibly account for the occasional adoption in LH III of

Apart from Colophon our only knowledge of Ionian sepulture comes from Samos,¹ where the excavation of a cemetery dating mainly if not wholly to the sixth century revealed 159 inhumations and only two cremations, a decline in cremation parallel to that already noted in Rhodes. Trial exploration of a neighbouring area, however, brought to light a remarkable approximation to a Homeric disposal. Inside a ring of stones which had marked out the base of a vanished tumulus there was found at the centre a thick layer of ash on which rested a broken amphora containing burnt bones. A second ring of stones doubtless marked the site of a second tumulus. Two neighbouring graves yielded terra-cotta coffins, and it may be conjectured that complete excavation would have shown a balance in favour of inhumation.

These Samian tumuli, surviving in an age of almost universal inhumation, are naturally explained as legitimate descendants of those of the Ionian Geometric age. Family tradition may well have played a part in maintaining the almost obsolete rite, especially if there were any who claimed descent from heroes of the Theban and Trojan wars. It is otherwise with the tumulus and pyres of Halos, which in the eighth century make a sudden and intrusive appearance in Achaia Phthiotis,² a region previously devoted to inhumation.³ Here again the points of agreement with Homeric practice are striking. The tumulus had been erected over the sites of sixteen pyres on which cremated human remains were found.

part of the ritual of cremation, though the corpse was preserved intact. The burning of articles of personal use other than the clothing worn by the deceased seems to have been adopted by the Achaeans settled in Gurob from the opening of the fourteenth century onwards. In many houses the floor was found to have been taken up and a hole dug about 2 feet square by 1 deep, in which many articles of personal use had been burned; after which the floor had been relaid. No bones were found with these objects, which included a stool, a mirror, necklaces, Kohl tubes, and toilet vases of stone and clay. The earliest datable group of these deposits goes back to the reign of Amenhotep III; it contained five Mycenaean stirrup vases. It is somewhat surprising to find a foreign settlement before the days of the Heretic King. II, as is generally assumed, the foreign inhabitants of Gurob were mercenaries, the employment of Achaians in this way coincides with their aggressive expansion in the Levant (Rhodes and Cyprus). Two groups of these deposits belonged respectively to the earlier and later years of Ramses II; they contained no imported pottery. See Flinders Petrie, *Illahun, Kahun and Gurob*, p. 16, and Brunton and Engelbach, *Gurob*.

A similar procedure is disclosed by the contents of the sacrificial pit in the entrance of the king's tomb at Dendra, in which, as appears from the amount of charred wood which it contained, objects of personal use were burned. They included chests whose mountings of gold and bronze survive, fragments of burnt ivory, pieces of pottery, and a few remains of jewellery. As vessels of precious metal and articles of jewellery were found with the skeletons in the burial pit, there is here a remarkable duplication. No doubt at Gurob appropriate gifts were buried with the mummies of the Achaeans whose goods were also burned and buried under their house-floors.

¹ Boecklin, *Aus ionischen und italischen Nekropolen*, pp. 12-13 and 32-4; *JHS*, lili (1933), pp. 170-1.

² *BSA*, xviii, pp. 1 ff. It will be noted that the single tumulus excavated by Wace and Thompson is only one of a group of ten, and that one of these has also yielded evidence of cremation (op. cit., p. 2).

³ *Bibl.* xxxiii, p. 12.

Presumably they represent a family group over which the tumulus was raised when the direct line became extinct; no doubt each pyre was provisionally protected by a small mound. Thus a temporary tumulus is raised over the pyre of Patroklos, although (since Achilles knows that his own time will not be long) the ashes are gathered and carried away in a golden vessel to be kept in the Myrmidons' camp against the day when they can be mingled with his own. The arms of the men of Halos are burned with them, as are those of Eetion and Elpenor in Homer; neither in Greek custom nor in the poems is the practice uniform in this respect. It does not seem extravagant to suggest that the *Iliad* itself may have played a considerable part in bringing cremation into the realm of Achilles in the eighth century and promoting its revival in the Kerameikos in the seventh.¹

Though the *Iliad* can hardly be regarded as that which it has sometimes been called, the Bible of the Greeks, it might nevertheless exercise a considerable influence in maintaining a laborious, costly, and uncertain method of disposal by enlisting in its support religious feeling as well as aristocratic sentiment and mere conservatism. In the speech of Patroklos' ghost to Achilles we have the kernel of the doctrine which made the cremation of the dead an imperative duty, and along with it the compromise that had been effected with the immemorially ancient tradition of burial. To this latter the house of Hades, vaguely indicated, but certainly situated underground, may be safely assigned; but what Patroklos claims is his due of fire, and if his shade inappropriately vanishes underground, his going is like a breath of smoke ascending from the funeral pyre. There are two set phrases dealing with cremation which make it probable that, as we should expect, poets before Homer had dealt with it in hexameter verse. *πυρὸς λελάχῃσιν* occurs thrice, *λελάχῃτε* once;² the causative reduplicated second aorist of this verb is found nowhere else. *πυρὴς ἐπιβῆναι*, *ἐπιβῆσαι* occur once each.³ Obviously the whole weight of epic tradition is on the side of cremation. Phrases more appropriate to burial are decidedly more frequent, but since the receptacle containing the ashes was put underground or, alternatively, a tumulus was raised over the ashes of the pyre,⁴ they do not involve a blatant inconsistency and would not shock an audience. *χρὴ γαῖα*⁵ undoubtedly refers to the tumulus, which normally connotes cremation. Of the other phrases, none is a set formula;⁶ none, therefore, is likely to be a survival from the days of inhumation, apart perhaps from such inconsiderable fractions as *γαῖα καθέξει*.

¹ The tomb of Phokos near the town of Aegina described by Pausanias (ii. 29. 9) may have been of the Halos type, with the addition of a stela, which in Homer is often associated with the tumulus (e.g. A 371, P 434-5, μ 14). There is no clue to its date.

² H 56, O 350, X 343, Ψ 76.

³ Δ 90, I 346.

⁴ There is no indication in Homer or elsewhere that the Greeks ever scattered the ashes.

⁵ Z 464, Σ 114. Cf. Ψ 256 and γ 258.

⁶ They are chiefly variations of *γαῖα κατέχει, εἶναι; ἵδαι, ἀφίστασθαι ἀπὸ γαῖας; δόσαι γαῖαν, χέειν*; see, e.g., Z 19, 411, H 609, Σ 352, γ 10.

None the less, the background of inhumation is there, and the day of its recrudescence is at hand, or rather has already begun. That Homer had witnessed cremations impressive enough to inspire the tremendous scene of *Ψ* seems beyond question. The importance for the occasion of a strong wind would hardly have occurred to a man who had not lived through tense moments while a hesitating flame flickered and perhaps went out.¹ That he and his audience were also familiar with burial is made equally certain by a single passage, that in which Agamemnon forecasts the death of Menelaos by the arrow of Pandaros.² His bones will rot in Trojan earth and Trojans will leap in insult upon the mound which marks his grave; which implies that the Achaeians will have given him full burial honours unhindered before their withdrawal. It is of interest that the *τύμβος* has ceased to be necessarily associated with the pyre, an association maintained both at Halos and on Samos. Homer's experience is, with perhaps a slight time-lag, exactly what that of an eighth-century Athenian would have been.

Small variations are observable in the ritual of cremation disposals, and these are mostly reflected in the poems. As at Halos, the mound of Patroklos is raised on the site of the pyre;³ this is probably meant, though not explicitly stated, in Hector's case as well.⁴ If, as seems likely, the ostothecae of Assarlik were covered by tumuli, they would offer a complete parallel to the *τύμβος*, *κάπετος*, and *λάρναξ* of Hector.

The ashes of Patroklos are finally mingled with those of Achilles in a golden amphora,⁵ but in the first instance they were collected in a *φιάλη*, a saucer or shallow bowl.⁶ The amphora or hydria is the regular receptacle alike in the proto-Geometric graves of the Kerameikos, where it is always of clay, and the Geometric graves of the Dipylon and Eleusis, where it is occasionally of bronze.⁷ The *φιάλη*, however, like the miniature larnax, is not uncommon in Etruscan cremation graves,⁸ and occurs once at Eleusis.⁹ The receptacle or the ashes themselves are stated to be wrapped in cloths.¹⁰ This practice also is found in Etruscan tombs,¹¹ but has little significance, since it was probably long-lived and wide-spread. The ashes of an Athenian cremation late in the fifth century had been wrapped in a purple cloth and the bronze lebes which contained them in another piece of material.¹²

¹ See the account of a Scandinavian chief's cremation on the banks of the Volga in the tenth century, *Antiquity*, viii (1934), pp. 58 ff., esp. p. 62. Throughout, the similarity in various points to Homeric procedure is striking.

² *J* 174-7.

³ *Ψ* 255-6.

⁴ *Ω* 795-9. The heap of stones over the ashes is also found at Halos.

⁵ *ω* 73 ff.

⁶ *Ψ* 253.

⁷ Poulsen, *Die Dipylongräber*, pp. 12, 13, 15.

⁸ Schachermeyr, *Etruskische Frühgeschichte*, p. 184.

⁹ Poulsen, *op. cit.*, p. 42; Skias, *Eph. Arch.*, 1898, p. 114.

¹⁰ *Ψ* 254, *Ω* 796.

¹¹ Schachermeyr, *loc. cit.*

¹² *JHS*, lvi (1936), p. 140.

2. IRON

Though the position of iron in Homer was in all essentials correctly summed up by Jevons¹ more than fifty years ago, we are now much more adequately provided with data to fix the dawn of the Iron Age in the Aegean.² Time has also added to the list of iron objects of Mycenaean date found in Greece and her settlements overseas without altering their character; almost without exception iron is used for personal ornaments which were doubtless—since the iron was in some cases invisible—regarded as amulets. No trace of this practice survives in Homer. Further, the literature on the first appearance of iron in the east Mediterranean area has been enriched by many valuable contributions, among which Mr. Wainwright's 'The Coming of Iron'³ is conspicuous.

The following is a list, it is hoped complete, of iron objects of the Bronze Age found on Minoan or Mycenaean sites:

1. Small cube of iron from pit with MM II contents in chamber-tomb in Mavro Spelio cemetery at Knossos; *BSA.* xxviii, pp. 279 and 296.
2. Ring from the Vaphio tholos tomb; period of transition from Shaft-grave culture to LH II; *Eph. Arch.* 1889, p. 147.
3. Front half and bezel of bronze ring partly overlaid with gold from tholos at Kakovatos contemporary with the Vaphio tholos; *AM.* xxxiv (1909), p. 275, pl. xiii, no. 35.⁴
4. Iron nail from Knossos with an ornamental gold head; *BSA.* vi, p. 66. Not precisely datable; LM I or II.
5. Half of bezel of ring from an LM tomb at Phaistos; *Mon. Ant.* xiv, p. 593, fig. 55.⁵
6. Three rings of iron, copper, lead, and silver from the King's Tomb at Dendra; Persson, *The Royal Tombs at Dendra*, p. 56; first half of fourteenth century.
7. Iron stud with gold head at either end from Chamber-tomb 2 at Dendra; Persson, *op. cit.*, p. 79; thirteenth century.
8. Iron pendant overlaid with gold from same tomb; *op. cit.*, pp. 102-3.

¹ *Ibid.* xiii (1893), pp. 25 ff.

² The two lumps of alleged iron from the Second City of Troy, much utilized by the late Andrew Lang, must finally disappear from the field of Homeric controversy. They were discovered in company with several stone axes in the excavation of 1890 and are mentioned as metallic iron in the joint report of Schliemann and Dörpfeld which appears as Appendix I in Schuchhardt's *Schliemann's Excavations* (p. 337). One, it would seem, has since been lost; the other, which has a square hole in it and may have been a muzzle-head, has been shown by analysis to be not metal but a crude mineral ore containing a high percentage of iron. Only this specimen is mentioned in *Troja und Ilion*, pp. 338-9, 367 (where it is implied to be the only one of its kind from the site), and 423 (the analysis); cf. fig. 356 on p. 385. Cf. Hubert Schmidt's description, *Schliemann's Sammlung trojanischer Altertümer in Berlin*, p. 244.

³ *Antiquity*, x (1936), pp. 5 ff.

⁴ In a ring from a chamber-tomb at Mycenae (Nat. Mus. Inv. 2656) there is a similar combination of gold with another metal, but it is not certain whether this is iron or silver. See *AM.* xxxiv (1909), loc. cit.

⁵ This is a ring of bronze overlaid with gold except the lower half of the bezel, which is plated with iron. On the bezel three figure-of-eight shields are represented in intaglio. On the following page (394), fig. 56, there is a ring, alleged to be of iron, which K. Müller found to be of silver. *AM.* xxxiv, p. 275, n. 1.

9. Fragments of an iron ring from Chamber-tomb I. r at Asine, end of LH II or LH III; Persson and Frödin, *Asine*, p. 373.
10. Two iron rings from Mycenaean chamber-tombs, presumably LH III; *Eph. Arch.* 1888, pp. 135 and 147.
11. Traces of iron on one of several lead clamps used for attaching door-jambs to walls of palace of Gha in Boeotia; LH III; Tsountas and Manatt, *The Mycenaean Age*, p. 381.

Remarkable finds recently made by the Swedish Mission at Malthi in Messenia,¹ probably the ancient Dorion, demand consideration. They consist of an iron dagger of central European type and several knives of Mycenaean shape² and were found in the uppermost stratum with pottery of the latest LH III type. As the occupation of the site thereafter ceased, there is no question of their having strayed from a higher level; they were, in fact, found in a three-roomed building in which the excavator believes a combined bronze and iron forge to have been installed. Moreover, a piece of iron in the shape of a double cone was found in a neighbouring tholos tomb. It must be observed, however, that we cannot fix even approximately the end of LH III at remote and outlying sites which were not immediately affected by the Dorian invasion; just as at Malthi MH culture lasted on through LH I and LH II, so that of LH III lasted to an unknown date because nothing came to replace it. It is a fair inference that this date was considerably later than the collapse of LH III in the Argolid. That the knives are of local manufacture there is no reason to doubt; though no slags were found (a curious fact if the building contained a forge), there was a number of lumps of a local iron ore said to be still used locally for smelting. It is therefore perfectly possible that together with the dagger knowledge of the method of producing malleable iron had reached Malthi from central Europe by way of the Adriatic, though not at the early date Mr. Valmin proposes.³

One article yet remains for discussion, viz. the iron harpe which is an item in the motley hoard of Tiryns (*v. supra*, pp. 68-9). This collection contained elements covering the period from LH I in its latest phase to the very end of the Mycenaean age.⁴ Only one, the harpe in question, is explicitly assigned by Karo to the sub-Mycenaean period, on the sole grounds of the non-Mycenaean shape and the material;⁵ since the shape, however, is Oriental, the harpe is

¹ Valmin, *The Swedish Messenia Expedition*, pp. 103 and 371-3.

² There were also pieces of thin perforated iron plate whose purpose is unknown. The Mycenaean shape of the knives affords no criterion of date, for it is shared by a proto-Geometric iron knife from the Kerameikos (*Keram.* i, p. 220, pl. 76).

³ The extremely unsatisfactory nature of the evidence for a similar alleged early appearance of malleable iron at Coppa Nevigata on the Italian coast, which Mr. Valmin adduces in support of his case, was long ago exposed by T. E. Peet, *Liverpool Annals of Archaeology and Anthropology*, iii (1910), pp. 118 ff.

⁴ Karo, *Der Schatz von Tiryns*, *Abh.* iv (1930), pp. 119 ff. The hoard was found in the ruins of a Mycenaean house; *op. cit.*, p. 120. For the harpe see no. 6228 a, p. 136, fig. 6.

⁵ *Op. cit.*, p. 138 f.

presumably an import from a region where iron had been in ordinary use and where the production of malleable iron had been known for a couple of centuries before the fall of Mycenae. We learn from ancient records that iron was known in Syria in the fifteenth century and in Mitanni in the fourteenth.¹ At Ugarit, in a sanctuary underlying an outbuilding of the palace, in a context which cannot be later than the middle of the fourteenth century and may go back into the fifteenth, Schaeffer found a magnificent axe-blade of malleable iron (*fer aciéré*) set in a socket of copper with gold inlay, the earliest known weapon of iron from the east Mediterranean area.² In the twelfth century iron appears on a number of Palestinian sites; at Gibeah an iron ploughshare is dated to the second half of the eleventh century and at Gerar many agricultural tools occur in the tenth. Beth Shemesh produced an iron chisel and sickle dated to c. 1000.³ With the collapse of the Hittite Empire at the beginning of the twelfth century the Hittite embargo on the exportation of iron and control of the method of producing useful iron had broken down.⁴ If we next consider the most probable date for the importation of the harpe into Greece, we are reminded that after the fall of Mycenae trade relations between Greece and the Levant apparently ceased completely for a time; not till the proto-Geometric age can we trace a revival of intercourse between Cyprus and Crete. The palace of Tiryns was to all appearance deserted; no proto-Geometric graves have so far been found to bridge the gulf between the latest LH III tombs and the Geometric cemetery, and it is at least improbable that any family in a position to import articles of luxury survived on the spot. Karo's sub-Mycenaean date therefore appears improbable, and in view of the decline of Mycenae in the twelfth century, the thirteenth appears more likely, though a unique find cannot afford a safe basis for argument.

To this same eastward source we may safely attribute a massive iron bracelet found by the Italians in a LH III cemetery of Ialysos, in a tomb which contained a number of inhumations and three cremations.⁵ Though most of the pottery was of the latest LH III type, the tomb also yielded a good Mycenaean gem, a Hittite seal, and an ivory comb and fragment of a box. Evidently the tomb belonged to a family which at one time was able to acquire foreign articles of luxury, and it is more reasonable to associate the bracelet with this period than with that of decline, especially

¹ (a) Articles in the temple treasure of Mishrifé-Qatna: Vroilleaud, 'Les Tablettes cunéiformes de Mishrifé-Qatna', Syria, ix, pp. 90 ff.; (b) articles in the dowry of a princess of Mitanni who was given in marriage by her brother King Tusratta to Amenophis III or IV of Egypt; J. A. Knudtzon, *Die El-Amarna Tafeln*, pp. 158-60. Besides rings which may be bracelets or finger-rings there is mention of an unidentified weapon of iron. In another letter (op. cit. i, no. 25, p. 300) a dagger is mentioned. Both documents are letters from Tusratta of Mitanni to the Pharaoh. Most of these objects were plated with gold. Cf. Schaeffer, *Ugaritica*, i, p. 116, no. 4.

² *Ibid.*, pp. 107 ff., figs. 100-3, pl. xxii.

³ G. E. Wright, *AJA.* xliii (1939), pp. 458 ff.

⁴ The famous letter from Hattusil III in answer to an application for iron, probably from Ramess II, shows at least in what quarter iron was sought. See *CAT.* ii, p. 267.

⁵ *Annuario*, vi-vii, p. 127, no. 74; cf. pp. 238 ff.

as it falls within the category of decorative articles, mainly personal ornaments, to which all the Mycenaean objects of iron with the single exception of the harpe belong. In the succeeding (the proto-Geometric) age iron jewellery is unknown, as it is in the Homeric epics.

A possible alternative source of supply in the later part of LH III has been found on the settlement site of Vardaroftsa near the east bank of the Vardar about 20 miles from its mouth. Here in a stratum which contained, besides much imitative ware, a small amount of genuine LH III,¹ none of it earlier than the thirteenth century, was found an iron slag with a very low metal content, showing that the iron had been extracted after the manner of copper, i.e. fused and then presumably cast. Iron thus produced would be extremely brittle, useless for making tools or weapons, but serving well enough for finger-rings. Hence Greek traders may have imported it as a side-line, though it must have been some more practical object that took them so far afield. In the level next above that just described a 'bad' iron slag was found which contained nearly twice as high a percentage of metal as that from the 'Mycenaean' stratum. In this case the ore must have been reduced at a very low temperature; the iron would not fuse, but would be a malleable iron or mild steel. The new process, however unskilfully or wastefully applied, marks the beginning of the Iron Age.² There are no Mycenaean imports at this level.

It is hardly conceivable that in either period the iron of Syria made its way up the Aegean. It is more probable that it came, whether by ship down the Black Sea or by a land route north of it, from the iron-producing regions of eastern Anatolia.

The position of Cyprus is peculiar. It might be thought that with iron abundant at Gerar the island could hardly remain in the Bronze Age; yet this is essentially what happened. It is true that iron knives appear in some of the tombs, but they are generally, perhaps always, articles of price, with handles of ivory, in one case finely carved. Iron cannot yet be said to be a useful metal.³ Similarly (apart from the axe-head mentioned above, evidently an object of cult), the only iron so far found at Uga-

¹ *BSA.* xxvii, pp. 21-2.

² *Ibid.* xxviii, pp. 197-8.

³ According to Schaeffer (*Mission en Cypre*, pp. 81-2) iron knives are associated in the tombs with circular bronze mirrors and steatite plates or palettes, and no genuine Mycenaean pottery occurs in conjunction with them. He regards the mirrors as a mark of lateness, and dates these tombs to 1150-1000. This seems rather an overstatement of the case. The mirrors which Schaeffer cites are comparatively poor affairs with no other carving than groups of incised rings on the handles; but mirrors with fine figure carving in a style certainly not Mycenaean, but akin to that of the carved ivories from Enkomi were found in the dromos of the tomb of Clytemnestra at Mycenae and are of early LH III date (*BSA.* xxv, pp. 369 ff. and pl. lix). A finely carved knife-handle in the shape of a bull's leg bearing a trace of the iron blade was found in the same tomb as the draught-box (*Exc. in Cyp.*, p. 25, pl. ii, no. 995; cf. p. 52, Tomb 58, and pl. i) and should not be much later, if at all, than the mirrors from Mycenae. The mirror-handle with the Griffin-slayer (op. cit., pl. ii), also a good piece of work, shows the ribbed Shandian and Pulesati corset, which disappears after the Land and Sea Raid. It may be doubted whether work of this sort was produced after the destruction of Ugarit by the raiders.

rit consists of beads and rings overlaid with gold.¹ As mentioned in the last chapter, an iron sword of the stabbing type and fragments of a second occurred in a Bronze Age tomb at Enkomi; presumably it belongs to the very end of the period. When Carchemish fell to a cremating and iron-using population, apparently as an episode in the great movement of the Land and Sea Raid, iron must have begun to come into general use. Not, however, until the opening of the proto-Geometric age early in the eleventh century does its export to the Aegean seem to have begun; at which date trade between Cyprus and Crete at least seems to have been resumed and Cyprus to have become an entrepôt in the iron trade.

Our knowledge of sub-Mycenaean culture is derived principally from the cemeteries of Salamis and the Kerameikos, briefly described in the opening chapter (pp. 39 ff.). The 112 sub-Mycenaean graves underlying the Pompeion which are published in *Kerameikos*, i conform to the Salamis type, for the seven iron rings, three from the fingers of a single skeleton, the amulet on the breast of a child, and the obscure and possibly intrusive fragment from another grave which constitute the entire iron yield of the cemetery are not sufficient to constitute a divergence.² Taken in conjunction with the considerable quantity of bronze rings and the greater number of pins and fibulae, they perhaps indicate a rather wealthier community. Iron is not yet known as a useful metal. Next comes a group of three graves which form a small extension of the (sub-Mycenaean) cemetery under the Pompeion;³ one contained a cremation, the other two an inhumation each, and of these one yielded an iron sword. That these graves mark the transition to the proto-Geometric series is shown by their position in the cemetery and by the continuance of inhumation; moreover, in the grave of the sword the semi-circles on the jugs which accompanied the deposition are hand-drawn, a practice soon superseded by the use of compasses. Of the new features presented by this group cremation almost at once became universal, as also the use of iron for swords; this second innovation was made contemporaneously throughout the Greek world, and extended almost without exception to spear-heads and knives. The Early Iron Age has begun. The deposition of weapons with the dead, though far from general, appears from time to time at Athens throughout the proto-Geometric and Geometric periods. It is certain that the earliest of the iron swords of Greece cannot have been produced locally; the sword is the final test of early iron-working, which tries its prentice hand on spear-heads and knives.

Thus, examining the iron weapons from the other proto-Geometric graves in the Kerameikos,⁴ we find that in one of the earliest, A, which

¹ *Ugaritica*, i, p. 292. From the city's port, Al Mina.

² *Ker.* i, p. 87.

³ The graves in question were excavated too late for inclusion in *Kerameikos*, i; to collect the available facts it is still necessary to refer to the original notice in *A.A.* 1937, pp. 197-9, as well as to *Ker.* iv, pp. 1 and 47.

⁴ The presentment in *Ker.* i of the facts concerning the proto-Geometric graves is com-

contained two cremation urns, one of these was accompanied by the remnants of an iron dagger and by a heavy bronze spear-head, the other by a small bronze spear-head alone, while an iron knife lay in the trench; in B there was the same combination of iron dagger and bronze spear-head. Tombs E and 6, both of the middle proto-Geometric period, contained each an iron sword, the former one of alien shape, while 17 contained an iron dagger and the first example of an iron spear-head. Only the last-named can with any confidence be claimed as of native workmanship and together with the certainly indigenous pins (p. 115, n. 3 *supra*) as testifying to the existence of a native industry, and, consequently, to the regular importation of iron.

Farther afield and possibly lying on a different trade-route is the island of Skyros, where an early proto-Geometric grave yielded an iron spear-head.¹ For a copious supply of iron, however, we must turn to Crete and to Assarlik. At Vrokastro in Crete,² in the only chamber-tomb (no. i) which yielded more than a trifling amount of iron, there were tools—axe, adze, and chisel or wedge—and weapons; the latter, however, were unfortunately reduced to a corroded mass from which little could be learned in the way of detail. It included swords which did not admit of reconstruction as well as knives and spear-heads; the total number of weapons is estimated at not less than twenty-five. The pottery of this tomb is of an early type; as, however, there were at least six depositions, it must have been in use for a considerable time. The only aids to dating which it contained were a volute tripod which has a parallel from a Late Bronze Age tomb at Enkomi³ and six sham faience scarabs of a class which has been found in Egypt in contexts dating to Dynasties XX–XXII (1200–950); one such was also found at Enkomi.⁴ We are able therefore to say that in a period contemporary with the proto-Geometric cemetery of the Kerameikos Crete had relations with

plicated and indeed somewhat confusing. Owing to the fact that a considerable time elapsed between the excavation of the five graves under the Pompeion (A–E) and the majority of those south of the Eridanos (1–20), the attempt to embody the results in a single chapter was abandoned. The account of Graves A–E appears on pp. 100–7, that of Graves 1–7 on pp. 89–100. Additional notes on Graves 4–7 and a full account of 8–20 occupy pp. 180–95. As the entry in the Index under 'iron' is defective, the finds must be collected by the reader from the descriptions of the graves. They are as follows:

- A. Associated with one of the two cremation urns, part of an iron dagger, accompanied by a large bronze spear-head; in the common trench an iron knife, pp. 100–2.
- B. Well-preserved iron dagger, also associated with a bronze spear-head, pp. 103–4.
- E. Iron sword with tapering blade, p. 106, fig. 8.
- 6. Iron sword of the later Geometric type, p. 99, pl. 76.
- 17. Iron dagger and spear-head, pp. 101–2.

The following graves contained fragments of iron pins, sometimes accompanied by similar fragments of bronze: 3, 9, 11, 13, 15, 16, 18, 20. One (14) contained bronze fragments only. Some of these graves contained objects associated with women and none contained any weapon. In 13, 15, and 16 the pins could be seen to form a pair.

¹ *AA.*, 1936, pp. 228 ff. Skyros may have got iron from Vardarofitsa, or more directly by the Black Sea route, if such existed.

² *Vrokastro*, p. 138. ³ *Op. cit.*, pl. xxxiv, 1 and 3.

⁴ *Exc. in Cyr.*, p. 47, pl. iv, 29.

Cyprus and commanded an adequate supply of iron, probably through Cyprus as an intermediary. In all probability she was herself the intermediary through whom the people of the Kerameikos first got their iron swords, and afterwards, when they had begun to manufacture their own tools and weapons, tapped the same ultimate source of supply.

The remains of tholos tombs at Assarlik¹ yielded, besides proto-Geometric pottery, iron spear-heads and knives in a ruined condition and no bronze weapon of any kind. The absence of the sword is not by itself any proof that the site is specially early; its inhabitants may have relied on spears, supplemented no doubt by good-sized knives, as did the men of the Warrior vase and, some centuries later, those on the reliefs of Carchemish. Unfortunately the condition of the Assarlik knives was apparently too bad to allow of measurement. Presumably Assarlik got her iron from the same source as Crete, whether through her or not there is nothing to show.

We cannot fix the date at which any one of the communities concerned became entirely independent in manufacturing such articles of iron as they needed, but the abundant eighth-century swords of Halos,² derived from a central European type, yet products of a purely Greek development, must be indigenous. This is probably true of the early Geometric swords from graves near the Acropolis of Athens;³ relations with Cyprus, however, are proved by the presence of a volute tripod in one of the graves, whereas at Halos, apart from the metal itself and the small amount of bronze, there was nothing of foreign origin. It is in any case certain that the first colonists of Ionia left the mainland of Greece with some knowledge of iron-smelting as well as familiarity with the manufactured article; the Cretan contingent in southern Ionia may have been rather more advanced. For conditions in Anatolia at or before the date of their arrival we have only the evidence of Assarlik, which shows that coastal communities at least had as good opportunities of getting iron as Greece, possibly better.

IRON IN HOMER

The tradition of heroic poetry was remodelled to admit cremation; apart from conservatism in the military use of bronze it freely admitted iron likewise. Off the battlefield the poet had a free hand and used it, not merely in similes but in descriptions of various articles and those not mythological only, but in ordinary use by the heroes; nor is there any real difference in this respect between the two epics. Only one formula in the *Odyssey* trenches on the prerogative of bronze as the military metal, the famous *αὐτὸς γὰρ ἐφέλκεται ἀνδρα σιδήρεος*, which belongs to the more than dubious episode of the Shifting of the Arms. The reasons for regarding the duplicated passage in which it occurs as an interpolation are numerous, and, in the view of the present writer, conclusive.⁴ Supposing it,

¹ *JHS.* viii, pp. 64 ff.

² *BSA.* xviii, pp. 1 ff.

³ See p. 265 *infra*.

⁴ They are admirably expounded by Monro (*Od.* xiii-xxiv) in a long note on the opening of τ.

however, to be original, it would merely furnish one more example of the somewhat less rigid conformity to heroic convention which the subject of the *Odyssey* permits, not a proof that Greeks had become more familiar with the metal. The iron axes of the Contest of the Bow¹ correspond to the prize for archery at the funeral games for Patroklos² and are a specific instance of the wealth a hero was supposed to have in store, χαλκός τε χρυσός τε πολύκιμητός τε αἰθήρος.³ πολύκιμητος implies knowledge of the new method of mild steel production with its day-long hammering; the simile in the *Odyssey* of the smith tempering iron adds explicit confirmation.⁴ The adjective was presumably coined to indicate the new knowledge, for it occurs once only in a different context, as a vague and inexpressive epithet for the thalamos of Penelope.⁵ The unique phrase αἰθήρειος δ' ὀρυμαγδός | χάλκεον οὐρανόν Ικε⁶ was probably suggested by the din of the smithy in which malleable iron was produced; *durum firmamentum ferit clamor ipse durior*, says van Leeuwen, ad loc. It is strange that a line which occurs twice in the *Odyssey*⁷ should speak of the αἰθήρειος οὐρανός whereas in several passages of both epics the heavens are said to be of bronze. The new adjective suggests a knowledge of meteoric iron, since a meteorite was probably supposed to be a fragment of the sky; but Greece was long past the stage of depending on meteorites for her iron. It is equally strange that the Egyptians should have changed their name for iron—*bia*—to *bia-ni-pet*, metal of heaven, just when they were beginning, c. 1300, to import manufactured iron,⁸ whereas in early days their extremely scanty knowledge of the metal seems to have been limited to meteoric iron. Possibly the Hittites, who controlled the supply and seem to have placed an embargo on the export, told them tales about its origin. It seems improbable that the Greeks should have derived the notion from Egypt, their relations with which from the XXth to the XXVIth Dynasty were slight and intermittent, if indeed direct relations existed at all. For aught we know, the idea may have been suggested by the fall of some conspicuous meteorite in the Aegæan area. News of such an event would spread far and be long remembered.⁹

The nature of the αὐτοσχόωνος σόλος¹⁰ which forms a prize at the funeral games cannot be certainly determined, but a meteorite seems best adapted to the rôle. A meteorite may consist of virtually pure metal and so might reasonably be described as 'self-smelted'; it might well have been the plaything of a king who perhaps valued it for its supernatural origin. The alternative 'a lump just as it came from the smelting furnace' does not suit the product of early iron-working, which can only be freed from the slag by perpetual reheating and hammering.

After πολύκιμητος the most significant epithets of iron are πολιός and αἰθων. That the former indicates the grey of steel is clear; Pindar could

¹ φ 76 and 81; cf. ε 324 and φ 16.

² Ψ 831-2.

³ Z 48, K 379, A 133, ε 324, φ 10.

⁴ α 391-3.

⁵ ε 718.

⁶ P 421-5.

⁷ α 329, ρ 565.

⁸ Wainwright, *op. cit.*, p. 13.

⁹ Cf. Plut. *Vit. Lys.* xii.

¹⁰ Ψ 826.

sufficiently designate that metal by calling it *πολιὸς χαλκός*.¹ *αἶθων* would well describe the tawny colour of rusty iron and would therefore be appropriate to iron not in regular use, such as the barter iron of *H* 473 and the cargo of *Mentes* (a 184), less so, however, to the simile of *Y* 372; moreover, there is a certain oddity in having two colour epithets for the same article. Other meanings have been suggested for *αἶθων*,² but only the colour meaning is applicable (more or less) in all cases: to lion and lion-skin (*Σ* 161, *K* 23-4), to horses (*M* 97), to a bull (*Π* 488), to cauldrons (*I* 123), to tripods (*Ω* 233). The supposed Homeric distinction between tools and weapons once thought significant has passed into limbo. Unitarians like Andrew Lang held that Homer lived in an age in which men's knowledge of iron-working enabled them to produce tools such as axes and knives, but not weapons. Homer is in fact inconsistent in the matter of axes, representing them now as of iron, now as of bronze;³ nor does archaeology support the hypothesis, for spear-heads and knives appear simultaneously at Assarlik and a variety of tools and weapons at Gerar.⁴ That the advent of swords, whose production calls for great proficiency in iron-working, may be somewhat delayed has been noted, while in all ages a good sword has been an *article d'exportation* from its country of origin.

Thrice in narrative parts of the *Iliad* the poet uses *αἰδῆρος* as he elsewhere uses *χαλκός*, i.e. to denote the metal in ordinary use; the lines in question are *Δ* 123, *Σ* 34, and *Ψ* 30-1. In each case it is possible to discern a reason for the departure from the standard convention. In the first case we are dealing with the arrow belonging to an Asiatic bow, a weapon which, as will be shown in a later chapter, does not enter into the older heroic tradition; those Greeks who were to become the Ionians first met it when they crossed the Aegean and settled on the Anatolian coast. It may well be that the arrow-head associated with it was normally of iron, as Homer's words suggest; the metal was easy of access. Archaeological evidence, however, is lacking.⁵ Another exotic arm is differently treated, the iron mace of *Areithoos*. Except for a few soldiers of fortune, Greeks west of Cyprus—and probably most Cypriots as well—cannot have seen this Oriental weapon in use. Why it should have been assigned to *Areithoos* we do not know; an Oriental association, however, is suggested by the statement that *Areithoos* used it in preference to the bow, which, as we shall see later, though used by the rank and file on the Greek side, is not the weapon of the Greek hero. That Homer was preoccupied at the moment with some poem, perhaps Cypriot, which recorded the adventures of a Mace-

¹ *Pyth.* iii. 84; (Schol. *ὑπερμαχία σάκος*): xi. 30.

² See Leuf on *B* 839. If we accept 'of fiery spirit' as a secondary meaning, this might conceivably be transferred to iron as the martial metal of Homer's own day; cf. *θεῖος* as an epithet of the shield. This would suit *Y* 372.

³ Cf. *Δ* 485, *N* 186, *Ψ* 118, and * 234-5.

⁴ Wainwright, *op. cit.*, p. 19.

⁵ In the Anglo-Turkish excavation now in progress at Old Smyrna arrow-heads associated with the attack of Alyattes on the city are mainly of bronze. They are, however, chiefly Scythian, and arrow-heads produced in Scythia are always of bronze.

man—Areithoos or another—seems probable, for his son is mentioned in the narrative (*H* 9-10) and the Mace-man himself is subsequently described by Nestor in a quite unrelated reminiscence (136-45). Mace and bow are both Assyrian weapons¹ and Cyprus is therefore a likely source for such a tale as may have come to Homer's ears. For the alien weapon iron is quite in order. The poet's only object seems to have been to work in the picturesque detail; the inconsistencies of geography and chronology involved show that he took little pains over the method.

In the second passage we are also dealing with something which, for a much deeper reason, lies outside the heroic convention. No hero in the *Iliad* or *Odyssey* commits suicide; at the most heart-rending turn in his fortunes Odysseus contemplates the possibility only to reject it. Epicaste indeed hangs herself, but in a passage certainly post-Homeric; nor indeed would a woman's death suffice to establish suicide as a possible resource for a hero. Only in the *Little Iliad* do we find the breach with heroic convention and the admission that by the malignity of fate the bravest of men may find himself in a position of such dishonour that voluntary death is a legitimate and indeed the only means of extrication. The position of Achilles is infinitely more tragic. By his insensate *amour-propre* he has brought about the death of the only human being (his mother being a goddess) with whom his relations were close and tender. What man would not think of suicide? Homer deals with the past as Shakespeare does, and in a situation for which tradition does not provide drops naturally into the idiom of his own day.

In *Ψ* 30-1 we may seem at first sight to be dealing with a mere accidental lapse from convention, but there is probably a deeper cause. The iron knife found in the trench of Grave A in the Kerameikos can hardly be other than that with which the animals destined for the pyre were slaughtered; its work over, it was thrown on to the pyre, as were the broken vessels which had served for the funeral feast. The introduction of cremation and that of iron have been found to be simultaneous; practically from the beginning this knife must have been of iron.² The adoption of cremation was the result of some profound emotional disturbance; it created the language of its own ritual, and there was no impulse to translate it back into the idiom of the Bronze Age.

¹ Carried together by warriors on reliefs from Arslan Tash (Unger, *Die Reliefs Tiglat-pileers III aus Arslan Tash*, pls. v and v6).

² Cf. the iron knives found in two Late Geometric graves (XI and XIX) in the Agora cemetery (*Hesperia*, Suppl. II, pp. 49 and 94), a grave at Eleusis (*Eph. Arch.*, 1898, pp. 181-2), and in graves on Thera (*AM.* xxviii, 1903, p. 235; *Thera*, II, p. 304). See also the three men on the neck of a prothesis amphora from the Agora who bring funerary objects; the third carries a large knife upright (*Hesp.*, l.c., p. 56, fig. 38). A huge chopping knife is depicted on a Geometric sherd from the Argive Heraion, upright between krater and tripod; a helmet hanging above the latter suggests that the scene is funerary (Pl. xvii, 2). The character of the chopper is made clear in a scene from the banquet on the Eurytios krater (*Mon. Inst.*, vi, pl. 33), a Corinthian work of the last quarter of the seventh century; it is for dismembering rather than slaughtering.

The epic gives us no help regarding the provenance of iron, traditional or actual: the one passage which bears on the subject (α 180-4) contains two proper names neither of which is identifiable. The Taphians were presumably one of those groups or communities which broke up and disappeared in one of those dispersals and shiftings of population which mark the end of the Bronze Age in the eastern half of the Mediterranean region. All that the poet knew about them would in that case come from ancient tradition, and he would have a free hand to invent if he chose to do so. Remnants of the Taphians apparently established themselves at various points on the west coast of Greece—on Meganisi, an island lying immediately east of Leukas, which must have taken from them the name of Taphios recorded by Strabo and which was therefore identified by the ancients with the Taphos of the *Odyssey*; on Kephallenia, and possibly in Aetolia. Pirates and slave-traders, they harried the Thesprotians. Presumably their homeland was not very far off; it has been identified by Leaf¹ with Coreyra, an identification which accords perfectly with everything that we are told about it. Temese, to whose inhabitants of alien speech Mentēs was carrying his iron, was variously identified by the ancients with Tempsa in Bruttium and Tamassos in Cyprus. Since he mentions the Taphians as doing business on the Phoenician coast,² the poet might conceivably have either place in mind, but the balance is decidedly in favour of Tempsa. Tamassos lies inland, whereas the words of Mentēs would naturally imply a sea-port, and the Cypriots, whatever vernaculars may have been current in the island, would hardly have been described by the poet as ἀλλόφρονι. Nor have we any evidence for the transport at any date of iron from Europe to a destination as far east as Cyprus. Tempsa is not disqualified because (in spite of various positive assertions) no ancient copper-workings have so far been found in the neighbourhood; the place may have been an entrepôt.³ The only point which concerns the present discussion is that a trading community settled somewhere on the east coast of the Ionian Sea or south Adriatic would be well placed for transporting iron on the final stage of its journey from various sites in Europe, and might, indeed, supply western Greece. As suggested above (p. 112) Dorion may afford an example, at least in the early stages of her iron industry.

¹ *Homer and History*, pp. 171-92, where full references will be found.

² α 427. It is permissible to doubt if this is anything but poetic fiction, comparable to the storm which carries to Ithaca the Phoenician ship with Eumaios on board. The Phoenician woman could not have been kidnapped by her compatriots; another set of recognized slave-traders had to be found.

³ See O. Davies, 'The Copper Mines of Cyprus', *BSA*, xxx, p. 81.

CHAPTER IV

WRITING IN THE AEGAEAN AREA; THE AGE OF ILLITERACY IN GREECE

THOUGH the question of the earliest date at which the Homeric poems can have been written down has lost some of the importance which it had when Wolf published his *Prolegomena*, it is still of interest to trace the history of script in the Aegaeon area, especially as the art was long believed to have been first acquired when the Phoenician alphabet was introduced.

When in 1909 Sir Arthur Evans published *Scripta Minoa*, the only evidence apart from isolated potters' or owners' marks for the use of script in prehistoric Greece was furnished by a jar from Mycenae with an inscription scratched on one handle, the fragment of a stone vessel with an inscription on the handle,¹ and a stirrup-vase from Orchomenos,² found in 1904, with an inscription painted on the body. In 1912, however, the German excavators of Tiryns announced the discovery of fragments of large coarse vessels some of which bore painted inscriptions;³ and in 1921 a still larger find, amounting to twenty-eight inscribed vases in a fragmentary condition, was made at Thebes.⁴ As at Tiryns the vases are all large coarse stirrup-vases, and the painted inscriptions are brief. Short accounts of the inscriptions in each find were given by Sundwall, in which their extremely close relation to the Cretan script was set forth.⁵ Like the Orchomenos vase, those from Thebes and Tiryns all belong to the LH III period, though not to its latest phase; the Tiryns specimens, though of mainland fabric, are not of local manufacture.

Those from Thebes, which were found stored on an upper floor of the palace, had probably been baked in the potter's kiln discovered in the court below. The Theban material has now been fully published by Evans.⁶ Eleusis has yielded an inscribed vase of the same class.⁷ The site of Malthi

¹ Tsountas, *Μορφω*, p. 214, figs. 1-4; Tsountas and Manatt, *The Mycenaean Age*, pp. 268-9, figs. 138-9. The stone vase is probably an import from Crete; the bronze axe-hammer from Delphi (*Scripta Minoa*, p. 59, fig. 35) may also come thence. Fragments from the excavations of Schliemann and Tsountas at Mycenae bearing one or more marks lay unnoticed in the museum at Nauplia until two were published by A. J. B. Wace (*RS.A.* xxv, pp. 20-1, fig. 5).

² Dessard, *Civilisations préhelléniques*, p. 428, fig. 318; *Scripta Minoa*, p. 57, fig. 31; *P. of M.* iv, p. 739, fig. 723.

³ Tiryns, ii, pp. 3 and 67.

⁴ *A.A.* 1927, pp. 268-9.

⁵ Tiryns, *Jb.* xxx (1915), pp. 63 ff., where the material derived from 14 inscriptions is treated in an appendix to an article on the Cretan linear script; Thebes, *Klio*, xxii (1929), pp. 228 ff.

⁶ *P. of M.* iv, pp. 737 ff. The mainland script is here shown to be the direct offspring of Linear B, the Knossian script of the period immediately preceding the destruction of the palace.

⁷ *Dellion*, 1931-2, Paratema, p. 25, fig. 26; *Af.A.* xi (1936), pp. 426-31.

(probably Dorion) in Messenia has yielded some half-dozen LH III sherds with incised signs of which a few are sufficiently complex to be described as inscriptions.¹ A clay bowl with an incised inscription was found among the furniture of a house-shrine or rather the sacred corner of a room resembling a megaron at Asine; it is dated by the other elements in the find to the close of LH III. The characters, however, are sketchy and it is not certain that this is a literate inscription.² Finally, Blegen's excavations near the site of the classical Pylos³ brought to light a Mycenaean palace in which some 600 inscribed clay tablets were found. Though they are still unpublished, much work has been done on squeezes taken from them, and the result is wholly unfavourable to any hope entertained that the language of the inscriptions might be Greek. If it were, from so great a mass of material some positive result must have been obtained by the 'greatest frequency' method.

That script was current on the mainland is, however, an established fact, and as its Minoan character is plain, the probability is that it was introduced in LH II, the period in which Minoan influence on the mainland was at its height and when the most closely related form of Minoan script (Linear B) was current in Crete. It is true that a few of the forms are more nearly akin to those of Linear A, which immediately preceded in Crete Linear B, the Palace style in use at Knossos from 1450-1400, and on this ground Evans holds that the script must have reached the mainland in LH I. Other explanations, however, are conceivable, and there is no material evidence from the mainland to support the hypothesis.⁴ Not only are the clay tablets of Knossos wholly lacking, but the clay sealings so abundant both there and at Zakro and obviously associated with commerce and the care of property are also absent.⁵ It is true that this complete lack of evidence in LH I may be due to accidental causes, as we must suppose to be the case in LH II, but the period in the former case is probably longer and the monuments are far more abundant. Until the discovery of clay tablets at Pylos the inscriptions of LH III were almost

¹ *The Swedish Messenia Expedition* (N. Valmin), pp. 389 ff., fig. 78, pl. xxix ff.

² Persson, 'Schrift u. Sprache in Alt-Kreta', *Uppsala Universitets Årsskrift*, 1930, Program 3; Lindqvist, 'A propos d'une inscription de la fin de la période mycénienne', *Bull. de la Soc. Roy. des Lettres de Lund*, 1930-1, ii. Evans holds that the inscription, at one end of which stands a series of apparently meaningless marks, is merely an attempt on the part of an illiterate potter to imitate some example of the old script which he had before him. The negative results of the Pylos tablets weigh against the hypothesis of the Swedish scholars that the language is Greek. For the house (G) see Frödin and Persson, *Asine*, pp. 74-6, fig. 53, pp. 298 and 308; Nilsson, *Minoan-Mycenaean Religion*, pl. iii.

³ *AJA*, xliii (1939), pp. 557 ff.

⁴ See Kuro, *Schackter*, p. 337, for the perhaps passive resistance offered by the occupants of the Shaft-graves to certain elements of the Minoan culture.

⁵ Only a single clay sealing has been found on the mainland (at Mycenae) and not in a datable context; it may, moreover, be a Cretan import (*JHS*, xli (1921), p. 263). No script signs appear on the engraved gold rings of Mycenae, Vaphio, &c.; the one gem (from Mycenae) which displays such signs (*Ch.T.*, p. 203, pl. xx, 16) was from the first recognized as foreign and is now known to be Hittite; cf. *supra*, p. 58.

confined to store vessels, which are but seldom to be found in tombs and occur in quantity only in buildings, and of these we have hardly a vestige to represent the periods of LH I and II; this fact also accounts for the long failure to find clay tablets or sealings. None the less, the failure to find them in Mycenae, which perished in just such a general conflagration as at Knossos preserved so much of the evidence by baking it,¹ is remarkable, and suggests the hypothesis that concurrently with clay some perishable material may have been in vogue. Now that Egypt and Phoenicia lay fully open to Mycenaean trade, unhampered by any competition on the part of Knossos, papyrus would be obtainable and must surely have been used not merely in the remote settlements of Tell-el-Amarna and Gurob, but in Ugarit, and if there, why not in Rhodes and mainland Greece?

It is possible that other perishable materials, notably skins, were used in both Crete and Greece. Rare as painted inscriptions are in Crete, they are not entirely absent; two, ink-written and of considerable length, occur on a pair of MM III *a* cups found at Knossos.² Whether they were produced by a brush or a soft reed-pen is uncertain, but the use of either suggests familiarity with some substance approximating to paper. The only other example from Crete, also found at Knossos, is painted on a sherd of LM III date which in all probability is an import from Greece.³ Its careful and precise execution differentiates it from the symbols scrawled on store-jars and suggests calligraphy practised on a different material. It is even conceivable that the apparent failure of Crete, where the script was native and appeared at least relatively early, to use it for historical records is to be explained by the use of some perishable substance. The absence of monumental inscriptions is less remarkable in the case of the mainland where the script was not indigenous and was probably used by a somewhat restricted class, in which palace officials probably took a leading place. Their functions, however, must have gone far beyond the keeping of palace accounts. Such a centre of government as Mycenae cannot have relied on verbal communications with its fortified outposts at Tiryns, the Larissa, Midea, Asine, and other points in the Argolid, not to mention remoter centres in Corinthia, Boeotia, and even Thessaly. Again, the Argolid was in close touch with Rhodes, Cyprus, Ugarit, and Egypt, in all of which places there were in the fourteenth century Mycenaean settlements. It is hardly conceivable that Greece, in possession of some form of script, should carry on intercourse with such literate powers as Egypt and—as we are now able to say—Phoenicia without making use of script at all. Finally, the case for identifying the Ahhiyawa of the Boghaz-keui records with the Achaeans or at least with some important branch of them

¹ From the fact that only tablets exposed to the effects of a conflagration have survived it must be concluded that normally they were merely sun-dried.

² *P. of M.* i, p. 588, fig. 431; pp. 613-16, fig. 450.

³ *BSA.* viii, p. 66, fig. 33; *P. of M.* iv, p. 738, fig. 732.

is, as we have seen, much rehabilitated; and the equation, shorn of the extravagances of its first presentment, may be provisionally accepted. It is improbable that the king of the Ahhiyawa who is addressed from time to time by the Hittite monarch as a royal brother should not be able to write in reply, or perhaps more probably keep someone to write for him.

So far there is no indication that the Minoan script was ever used for the writing of Greek.¹ It is easy to imagine circumstances in which Minoan would be the Court language at Mycenae and in the Peloponnese generally, at Thebes and even Iolkos; what language and what script were used in diplomatic correspondence with the Hatti we cannot even conjecture. It is, however, unlikely that the use of script was limited to official purposes. Commerce may have played in spreading it something like its rôle some centuries later in the diffusion of the Phœnician alphabet over the Greek world. The extensive trade relations to which the distribution of Mycenaean pottery bears witness can hardly have been maintained without systematic records and correspondence.

Some evidence of a fragmentary, ambiguous, and tantalizing character is to be found in Bronze Age Cyprus, where the Mycenaean settlers employed a script which presents a number of perplexing features. It contains certain elements common to the Cretan and mainland varieties of the Minoan script and a few peculiar to the mainland. The considerable majority has at present no parallel in either, but the testimony of Pylos is yet to come. In these circumstances it would be idle to conjecture whether the Cypriot script is in substance that of the mainland brought with them by the settlers of the fourteenth century; nor is there at present any hope of determining whether the language it records is Greek.²

Though there is undoubtedly some relation between the Bronze Age script of Cyprus and the syllabary³ used in the historic period for the

¹ Apart from the negative evidence of the Pylos tablets, there is the fact pointed out by Evans in his review of the inscriptions from Thebes and Tiryns that certain series of signs in both groups form name-groups which also occur at Knossos in the Palace script.

² There has been a great increase in the number of Cypriot signs known to us since Evans discussed their relation to the Cretan and mainland varieties of the Minoan script in *P. of M.* iv (pp. 758 ff.) in 1935. He used only 15 signs (having discarded 3 of those employed in his earlier discussion in *Scripta Minoa* and replaced them by 3 others). The late S. Casson raised the total number to 29 (plus 2 which may be variants) which he published in *Ancient Cyprus*, ch. iii, in 1937, between which date and the outbreak of war fresh signs accrued (*A.J.A.* xlii, ch. iii, in 1937, p. 272). Even if some of these are ultimately discarded as variants, the Cypriot script on the available evidence cannot be regarded as a mere variant of the Minoan, but the evidence of the Pylos tablets must be awaited if we are to have a solid basis for estimating the proportion of agreements in the three scripts involved. It may be suspected, however, that the Mycenaean colony in Ugarit supplied some of the Cypriot signs.

³ Casson, pp. 60 ff., and for a guide to the literature Thumb, *Handbuch der griechischen Dialekte*, § 272. The syllabary was not used exclusively (and certainly not originally) for the writing of Greek. Some half-dozen inscriptions from Amathus or its neighbourhood are in an unknown language (*RE.* xii. 1, col. 89, s.v. 'Kyptos'; Casson, p. 68). Since Amathus claimed to be the oldest city of Cyprus (Steph. Byz. s.v.) and a seat of the autochthones (Skylax, *Periplus*, 103), it is a reasonable conjecture that the language is that which the Mycenaeans found when they planted their settlements in the fourteenth century.

writing of the Cypriot dialect of Greek, it throws no light on our problem. The syllabary includes fifty-five signs, excluding a few which are either doubtful or variants; of these seven have counterparts in the Bronze Age script and four probable equivalents. The existence in several cases of Phoenician bilinguals having made decipherment possible, the phonetic values of the signs were gradually established; it was some time, however, before the language was identified as Greek, so peculiarly ill-adapted is the syllabary for the rendering of that language. The relevant inscriptions begin in the sixth century and continue well into the fourth, when the syllabary was superseded by the ordinary Greek characters. Inscriptions belonging to the period between the end of the Bronze Age and the sixth century are extremely few and not very revealing; two, however, contain several signs and can be plausibly read as Greek. That there is continuity in the practice of writing and some degree of it in the actual script is certain, and the paucity of examples in the Early Iron Age, so far as it is not accounted for by a natural spread of illiteracy, can be easily explained by the hypothesis that inscriptions were mostly recorded on some perishable substance, probably wood.¹

It follows with tolerable certainty that Greek visitors to Cyprus in the eighth century would find their kinsmen writing Greek in a peculiar script,² though it can hardly be doubted that at the same time and in the same region they did business with Phoenicians and received from them the alphabet destined to become that of Europe. We may go farther and suspect Cypriot men of business of being conversant with both forms of script. The Phoenician alphabetic script has proved to be much older than was supposed. The famous inscription on the sarcophagus of Ahiram found in a tomb at Byblos,³ though it cannot be precisely dated, goes back

¹ The rectilinear character of the script had long ago led Myres to this conclusion (*Cassida Catalogue*, p. 301). Paint would be a natural addition to inscriptions on wood and may account for the Cypriot use of *mallos* = *πάλλω*. *V. infra*, p. 525, n. 2.

² Hence possibly sprang the tale which ascribed to Palamedes instead of Kadmos the invention, so far as the Greeks were concerned, of writing. The Cypriot Greeks would rightly claim that writing had been practised by them long before the introduction of the Phoenician alphabet; it must therefore have been introduced by those heroes of the Trojan War whom their cities claimed as founders and who could have profited by this invention of Palamedes. The earliest extant evidence for the story comes from Stesichorus (Bekker, *Anec.* ii, pp. 783, 16; 786, 11). According to Diodorus the Cretan, the alphabet was invented in Crete (*ibid.*, p. 783). Local tradition, based conceivably on Minoan monuments, may have formed the basis of his view.

³ P. Montet, *Byblos et l'Égypte*, pls. cxxxvii-cxli. The inventive activity in the matter of scripts which characterizes the fourteenth century should be noted. The Tell-el-Amarna cuneiform is virtually a syllabary, in which the 670 signs of the orthodox cuneiform with their extravagantly varying values have been reduced to 120 with fixed values. In the same century Ugarit took an even more crucial step by producing a cuneiform alphabet of 30 signs representing, probably, 28 sounds. In the thirteenth century the time was ripe for the invention of the Phoenician alphabet. At the end of the twelfth century, a date to which some scholars incline, conditions were all unfavourable. Not only had Phoenicia suffered in the Land and Sea Raid repelled by Ramses III, c. 1194, but c. 1102 she was overrun by Tiglath-Pileser I; on one occasion or the other Sidon and Ugarit were totally destroyed, and probably the other

to the beginning of the twelfth century or the end of the thirteenth. There is no reason to suppose that Phoenician relations with Cyprus were not maintained, no doubt in varying degrees of activity, throughout the intervening period. In their commerce writing must have played a part, and Cypriot script would not be employed.

The discovery of the Cretan script and of its extension to the mainland profoundly altered the conception of the Bronze Age current in the last quarter of the nineteenth century. Scholars had generally (and rightly) accepted Aristarchus' doctrine of the illiteracy of the Homeric heroes, to which attention had been called as early as 1833 by Lehrs in his *De Aristarchi Studiis Homericis* and to which it was redirected in 1882 by the appearance of the third and last edition of his great work. By that date the excavation of the Shaft-graves had revealed a material culture of great antiquity which, though advanced from the point of view of art, the technique of metal-working and so forth, yielded no evidence that writing was in use, and whose representatives others besides Schliemann were inclined to equate with the generation which fought before Troy. Once the use of script was established not only in Crete but in mainland Greece in the great days of Mycenae, it was necessary to date down heroic illiteracy to the succeeding period—to that, namely, in which the practice of cremation began and the use of iron became general.

On the other hand, the date of the introduction of the Phoenician alphabet was still undetermined and there was a tendency to date it high. This was possibly fostered by those who wished to see Greece literate at a date which would have allowed the Homeric poems to be written down by the men who composed them. Lehrs had pointed out¹ that there was no evidence in the scholia that Aristarchus had supposed Homer to be ignorant of writing, and the archaeological evidence available suggested that the poems might have been written down long before the days of Peisistratos. It is true that the use of the alphabet was generally put higher than is warranted by the archaeological evidence at present available for the resumption of intercourse between the Phoenicians and Greeks, but the case was not unreasonable. The earliest datable Phoenician inscription, that of Mesha king of Moab, was fixed to the years 842-840, and the script was obviously mature. It was assumed that its diffusion would be rapid, and the appearance in the Aegina 'treasure' of incontestably Phoenician articles dating, as was believed, to c. 800 showed that means of transmission existed. The chronology of the Geometric age, still obscure, was then quite unexplored; the inscription

Phoenician cities as well. The circumstances were not such as to promote the use of script, but might well explain why one already current retained its form unchanged. Phoenician script is in fact highly conservative, exhibiting extremely little change in the ninth, eighth, and seventh centuries, in which it hardly diverges from the Greek alphabet to which it had given birth; the novelties are all on the side of the Greeks.

¹ Op. cit., 3rd ed., p. 328; cf. p. 95 and Schol. A ad *Z* 162 and *H* 175.

on the Attic jug, first published in 1881, had an extremely archaic appearance, and the earliest inscriptions from Crète, Thera, and Melos suggested that the Greeks had acquired the alphabet in a yet more primitive form. It is not surprising that 900 was not considered too early a date for that event.¹

That the Greek alphabet was formed in and diffused from a single centre is generally admitted on the grounds of the uniformity shown in the acceptance of the vowel signs and in the value and order of the original characters. Lariel writing in 1913 thought that only a pronouncement from Delphi could have secured such agreement, which did not survive the introduction of the complementary signs. To-day it seems more probable that adoption and adaptation were carried out by some small group of Greeks engaged in trade with the Levant who realized the value of the Phoenician invention. That this was done not later than the middle of the eighth century is certain. As we have already seen (pp. 71 ff.), somewhat above that date Oriental imports had begun to appear in Greece and especially in Attica, at first in a thin trickle which increases in volume in the second half of the century and especially towards its end; simultaneously Oriental *motifs* intrude into the decoration of Geometric pottery. The contemporary occurrence of Greek Geometric ware, almost wholly Attic, in Cyprus proves direct relations between Attica and

¹ One scholar at least went farther. Wilamowitz in his brilliant and exceedingly influential book, *Homericische Untersuchungen* (1884), pp. 226 ff., regarded the illiteracy of the Homeric heroes as self-evident and accounted for it in the only possible way, viz. on the lines of Aristarchus—the poet is recording a remote past of whose manners a strictly guarded tradition had been preserved in epic from which he was careful not to depart. Of the poet's or poets' own literary Wilamowitz had no doubt. The introduction of the Phoenician alphabet he put far higher than the evidence warranted; it had been used, he supposed, in pre-Dorian days by the Achaean and Ionian inhabitants of Greece, from whom the Dorian invaders learned it and in their turn carried it abroad to their settlements in Crète, Thera, and Melos. Thus he accounted for the alphabet employed in the earliest inscriptions of those islands, unique in its lack of the complementary signs, and therefore presenting, whatever the date of the actual inscriptions, the Greek alphabet in its earliest form. It is difficult to reconstruct his chronology; but if he accepted the earliest of the traditional dates for the siege of Troy (in the fourteenth century), he could utilize for the expedition the illiterate occupants of the Shaft-graves and take the introduction of the alphabet as falling in the thirteenth. Had the discovery of the Ahiram inscription come in time for him to make use of it, he would naturally have taken it for confirmation, if not demonstration, of his theory. Others in his place have put forward this theory of the immediate spread of the Phoenician script to Greece in the thirteenth or even the fourteenth century, but as has been shown above, there is nothing whatever in the archaeological evidence to support this view and much to refute it; it should not be entertained. That Wilamowitz long adhered to those views is indicated by the fact that just twenty years later his son-in-law Hiller von Gaertrigen felt it necessary to state that he could not accept the derivation of the early alphabet of Thera from any Greek centre but 'vielmehr direkte Übertragung von den Kaufleuten des semitischen Osten annehmen möchte' (*Thera*, iii, p. 78).

The dating orthodox at that time is presumably given in *RE*. i (1894), col. 1613, s.v. 'Alphabet', by Seanto, as in the tenth century and by Gercke in *Hermes*, xli (1926), p. 539, as not long after 900. It is more surprising to find Meyer in the latest (1931) edition of the *Geschichte des Altertums* (ii, 2, pp. 67 and 118; which fall within the part of the work completed by Meyer himself) putting it as about 900, and Rehm (*Handbuch der Altertumswissenschaft*, vi, 1, *Handbuch der Archäologie*, I, p. 197) expressing a preference for the tenth century over the ninth and refusing to exclude the eleventh.

the island and presumably the Phoenicians in it.¹ All the conditions for the adoption of the alphabet are present, and the inscription on the Attic prize jug,² datable, roughly, to the third quarter of the eighth century, shows that it took place. Further, the presence of a supplementary sign— χ —in the inscription agrees with the fact that the differentiation according to dialect of the values of these signs had taken place before the foundation of the earliest colonies, which follow in this respect the scripts of their mother cities. The comparatively trivial subject-matter of the inscription argues that the practice of writing was by this time fairly common and that the alphabet must therefore have been introduced somewhat earlier—early enough, perhaps, to record the name of Koroibos as victor at Olympia.³ Those who believe, as many Homeric scholars do, that the two epics received their final form in the second half of the eighth century or even a trifle earlier will not deny to 'Homer' the capacity to write any more than did Aristarchus; but it is improbable that the once burning interest of that controversy will revive.

It remains to consider the only apparent reference in Homer to writing, but as the tale of Bellerophon cannot be fully considered without reference to its position as well as that of the tale of Lycurgus in *Z*, examination of it is reserved for the final chapter. It may, however, be pointed out that Bellerophon has no connexion with the tale of Troy, and that therefore the carefully disguised allusion to script is not in the full sense a breach of epic convention.

The following tables, which give the alphabets of the earliest Phoenician and some of the earliest Greek inscriptions, are reproduced from *AJA.* xxxviii (1934), pp. 364-5, by the kind permission of the Editor. The notes are by Professor Ullman, whose article 'How old is the Greek Alphabet?' is illustrated by the tables.

¹ The discovery, or rather recovery, by Mr. Mitford in the museum of Nicosia of a Phoenician inscription of the ninth century and its publication by Professor Honeyman (*Iraq*, vi, pp. 106-8) have put beyond doubt the settlement of the Phoenicians in the island by that date. The inscription is cut on native stone of a kind found in the SE. corner of the island, remote from the known Phoenician sites; it records a curse upon tomb-robbers and states that the occupant of the grave is only an ordinary man.

² See Table II, p. 131, *infra*. The once fashionable supposition that the inscription which marks the jug as a prize was added at an appreciably later date has been disposed of by the discovery on Mt. Hymettus of a number of inscribed Geometric sherds. They date to c. 700; the script is of a later type and the cheapness of the ware and the complete triviality of the inscriptions indicate that ability to write was fairly general. All these inscriptions are *graffiti*; the earliest inscription painted on a vase before firing is that on the fragment of a proto-Corinthian pyxis from Aegina dated by Payne to the beginning of the second quarter of the seventh century (*NC.*, p. 98, fig. 39).

³ A friend points out to me the inadequacy of a consonantal alphabet like the Phoenician in the rendering of proper names, which, as the Censor's office could have testified in the late war, often cannot be determined, a point of some importance in the matter alike of commercial contracts and public records. The invention of vowel signs is one worthy of the Greeks, but not one demanding much time for reflection or experiment; it was probably simultaneous with the adoption of the *Φωνηέντα γραμματα*. Aleph, he, and yod pointed the way to a, e, and i; there was not very much left for the Greeks to do.

TABLE I—SEMITIC

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
KKKK	KKK	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
9999	999	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
777	777	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	44	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
333	3					333	333	333	333	333	333	333	333	333	333	333	333
YYY	YYY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
I	I				I	I	I	I	I	I	I	I	I	I	I	I	I
HHH	HHH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
VVV	VVV	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
LL	LL	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
33	33	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
55	55	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
FF	FF	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	77	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
99	99	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
++	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

NOTES ON TABLE I

So far as possible, the letters are reproduced from photographic reproductions rather than drawn copies, which are often very inaccurate. The source is given in each instance.

1. Abiram, Byblus, XIII c. P. Montet, *Byblus et L'Egypte*, 1928, pl. cxxxix-cxli (photographs of stone and of squeezes) and S. Ronzevalle in *Mélanges de l'Université Saint-Joseph*, xii, 1927, pls. iii, iv (photographs of plaster cast).

2. Yehimilk, Byblus, XII c. M. Dunand in *RB*, xxxix, 1930, p. 322 and pl. xv (copy, photograph).

3. Arrow of Roussieh, XII-Xc. R. Dussaud in *Syria*, viii, 1927, p. 185 (photograph).

4. Abibaal, Byblus, 947-923 B.C. R. Dussaud in *Syria*, v, 1924, pl. xlii (photograph of squeeze).

5. Elibaal, Byblus, 925-889. R. Dussaud in *Syria*, vi, 1925, pl. xxv (photograph) and p. 109 (copy).

6. Gezer calendar, c. 900. J. Lindblom in *Acta Academiae Aboensis, Humaniora*, viii, 3, 1931 (photograph) and S. Ronzevalle in *Mélanges de l'Université Saint-Joseph*, v, 2, pl. xvi (photograph).

7. Samaria, c. 865. G. A. Reimer, C. S. Fisher, D. G. Lyon, *Harvard Excavations at Samaria*, 1908-1910, 1924, i, p. 239 ff. (copy).

8. King Mesha of Moab, c. 842. M. Lidzbarski, *Handbuch der nordsem. Epig.*, ii, 1898, pl. i (copy).

9. Kalamu, Senjirli, c. 825 (Kalamu's father reigned in the time of Shalmaneser III, 853-843). F. von Luschan, *Ausgrabungen in Sendschirli*, iv, 1911, p. 375 (copy).

10. Nora, Sardania, end IX c. (for date see R. Dussaud in *Syria*, v, 1924, p. 145 and Lidzbarski quoted by von Bissing in *Fidelegia Bithynia Rakiti*, 2, 1930, p. 75, n. 12; the unclear letter generally supposed to be a late form of *sameth* is explained as *men* by Dussaud). Lidzbarski, op. cit., pl. ii, 3 (copy).

11. Zakir of Hamath, c. 800. H. Pognon, *Inscriptions sémitiques de la Syrie*, etc., 1907, pls. ix, x (photographs), xxxv, xxxvi (copies).

12. Hadad (Panamir) II, Senjirli, beginning VIII c. Von Luschan, op. cit., i, pl. vii.

13. Cyprus bowl (Baal Lebanon), 753-745. Lidzbarski, op. cit., pl. ii, 1.

14. Sefire, near Aleppo, 752-740 (for date see R. Dussaud in *Comptes Rendus, Acad. Insc.*, 1935, pp. 318-19). S. Ronzevalle in *Mélanges de l'Université Saint-Joseph*, xv, 1930-1, pls. xxxix-xlv, especially xl, xlii, xlv (photographs).

15. Bac-rehab (building inscription at Senjirli), c. 735. Von Luschan, op. cit., iv, p. 379, figs. 275 (photograph), 276 (copy).

16. Nerab, VII c. G. A. Cooke, *A Text-Book of North-Semitic Insc.*, 1903, pls. v, vi (photographs).

17. Ur, VII c. (probably before Nebuchadnezzar, 604-562). E. Burrows in *Jour. Royal Asiatic Soc.*, 1927, pl. viii (photograph).

18. Carthage, IV-III c. Lidzbarski, op. cit., pl. xlv, col. 21.

TABLE II—GREEK

[illegible]

NOTES ON TABLE II

The table gives some of the earliest examples of Greek writing. The dating is conservative; perhaps some of the inscriptions are much earlier. As most of them are written in retrograde or boustrophedon, all the dextrose letters have been turned to read from right to left for facility in comparison, except in Col. 11 which has not been altered from its dextrose position. There is great need of a collection of photographs of the earliest Greek inscriptions; the old copies are obviously very inaccurate and inadequate for paleographical studies. In some cases there should be several photographs of the same stone taken from different angles, as well as photographs of engravings.

1. Athens, Dipylon vase, VIII c. Studniczka in *Att. Mitt.* xviii, 1893, pl. x (photograph and copy).
2. Thera, VIII-VII c. H. Roehl, *Imag. Insr. Graec. Ant.*, ed. 3, 1907, I, 6, p. 2 (copy).
3. Thera, VIII-VII c. Miscellaneous items from Roehl, Roberts (*An Introduction to Greek Epigraphy*, I, 1887, nos. 1-4), *IG*, xii, iii (copies).
4. Crete, Gortyn, VII c. Halbherr and Compareschi in *Mus. ital. ant. class.* ii, 1858, pl. 189 ff. (copy).
5. Crete, Eleutherna, VII c. *Ibid.*, pp. 162-3 (copy).
6. Naxos, Homolle in *Bull. Corr. Hell.* iii, 1879, pl. I (photograph).
7. Corcyra, Memorates tomb, VII c. Roehl, x, 26, p. 47 (copy).
8. Corcyra, Amiadus tomb, VII c. (630-620, Hiller v. Gaertringen in *Phil. Week.* lü, 1933, p. 990). Roehl, x, 25, p. 46 (copy).
9. Boston, Museum of Fine Arts (west Ionic? Boeotian?), VIII-VII c. Tarbell in *Rev. Arch.* xl, 1902, p. 41; J. C. Hoppin, *A Handbook of Greek Black-Figured Vases*, 1924, p. 3 (photographs).
10. Florence, Marzillana alphabet (Etruscan), about 700 a.c. Photograph (cf. G. Bonamici, *Epigrapha etrusca*, 1932, pl. II).
11. New York, Vulturno alphabet (Etruscan), VII c. *Bull. Metropolitan Mus. of Art*, xx, 1925, p. 270; Bonamici, *loc. cit.* (photographs).

CHAPTER V ARMS AND ARMOUR

1. THE SHIELD

καὶ γὰρ ἐπὶ τὰ κράνεα λόφους ἐπιδέεσθαι Κῆρες εἰσι οἱ καταδέξαντες καὶ ἐπὶ τὰς ἀσπίδας τὰ σημεῖα ποιεῖσθαι, καὶ ὄχυνά ἀσπίσι οὗτοί εἰσι οἱ ποιησάμενοι πρῶτοι· τέως δὲ ἄνευ ὀχύνων ἐφόρεον τὰς ἀσπίδας πάντες οἱ περ ἐώθεσαν ἀσπίσι χρᾶσθαι, τελαμῶσι σκοτίνιοισι οἰηκίζοντες, περὶ τοῖσι ἀνχέσι τε καὶ τοῖσι ἀριστεροῖσι ὤμοισι περικελμένοι.

HEROD. I. 371.

THIS passage from Herodotus acquired a new importance when on certain finds from Schliemann's excavations at Mycenae a pre-Hellenic type of armature was identified which included a great body-shield slung by a telamon from the left shoulder and having no blazon. As early as 1883 and 1884 Leaf and Helbig pointed out¹ that the figures on the Lion-hunt dagger-blade, the gold bead-seal with the duel, and other small objects from the Shaft-graves admirably illustrated certain passages in the *Iliad*; but the first to investigate systematically the relation of the Homeric poems to the products of Mycenaean art, as it was then called, was Wolfgang Reichel, whose treatise *Homeriche Waffen* appeared in 1894. The first edition was soon exhausted, and the criticism which it received induced the author to subject his work to a thorough revision combined with an extension of its original scope which was still incomplete when he died in 1901. The sections on protective armour, however, had received for the most part their final treatment, and it is not too much to say that they have formed the basis or at least the starting-point of all subsequent discussions of the subject.

It is obvious to-day that Reichel grossly exaggerated the Mycenaean element in the Homeric poems;² yet by demonstrating that it existed he

¹ *JHS.* iv (1883), pp. 281 ff.; *HEA.* pp. 218, 222. Priority of publication falls to Leaf, who, however, excluded the figure-of-eight shield from the comparison.

² Of the round shield (which, conceived of as the hoplite shield with arm-band and hand-grip, he took to be only alternative to the body-shield) Reichel admitted only four examples in Homer: the shield of Agamemnon (*A* 33-7); that of Diomedes in the Doloneia, since it permits him to mount on horseback (*K* 513), those of his companions, who use them as pillows (*K* 152), and that of Agastrophos, because it is used in conjunction with a corselet (*A* 373). Of course this result was not attained without much wresting of the evidence, both linguistic and archaeological. The epithets *εἰς ὅσον ὅλον* and *ἀεὶκυλός* were applied to the body-shield and interpreted as 'covering all parts equally' and (roughly) 'round', which Reichel considered appropriate to the figure-of-eight shield. Any shield which had a telamon or was made of leather, even in combination with metal, he reckoned as a body-shield. Further consideration of the Warrior vase and kindred monuments, on which he left only brief and unsatisfactory paragraphs (*HW.* 3, pp. 45-7), might have led him to modify these conclusions; but at the time of his death and until the excavation of Knossos supplied some absolute dates, the chronology of the whole Mycenaean age was obscure. Moreover, the study of the sub-Mycenaean and proto-Geometric age had not even begun. Hence this vital period was inevitably ignored by Reichel, who

obliged scholars to revise their view of the ancestry of the poems and the nature of the tradition they preserve. Critics who questioned all his other conclusions conceded that in his account of the boar's tusk helmet (*K* 261-5) he had hit the mark; and as this admission implied that somehow the poet was able to describe accurately an object which never appears after the close of LH III and probably ceased to exist appreciably earlier, a continuity of literary tradition was established which bridged the gulf between the end of the Mycenaean age and the rise of Hellenic Greece.¹

Although in the case of the boar's tusk helmet a long interval between its disappearance and the composition of the *Iliad* is certain, we are not justified in making without investigation the same assumption about the body-shield. It may be that in regions on which archaeological exploration has so far thrown little or no light the body-shield survived in obscurity long enough to maintain a place in the heroic poetry of the Dark Age. Though the monumental evidence available is not sufficient to settle the point, it is worth while to examine afresh everything that bears on the history of armature in the Aegean area, firstly in the Bronze Age, next in the period of some centuries covered by the proto-Geometric and the early Geometric age, then in the time of the developed Geometric culture when representational art once more comes to our aid, in however unsatisfactory a form, and finally in the archaic age, down to the establishment in Greece of the hoplite shield with arm-band and hand-grip.

Nor is this enough. Though from the end of the Bronze Age to about 800 B.C. the Aegean appears to have been all but completely cut off from the Levant and to have maintained only through intermediaries such relations as are implied, e.g., in the continuous importation of iron, it is important to keep an eye on the material culture of the Near East, illuminated sometimes, though not always, when the Aegean is in darkness; for Eastern influence is clear, as will be shown, on Aegean armature in LH III, and it is manifested again when the round shield makes its appearance beside the 'Dipylon' in the eighth century.

Our investigation must begin with such monuments of the Aegean Bronze Age as bear on armature. It might be supposed that to illustrate the material civilization depicted in the Homeric poems there could be no occasion to go back beyond 1400, the approximate date of the opening of the Third Late Helladic period, within which falls, according to the various traditional datings and to the archaeological evidence, the event which

cannot have suspected that the best part of his evidence dated to the sixteenth century B.C. Nevertheless, it must be admitted that in regarding the latest Mycenaean and the Dipylon culture as contemporary he sinned against the light of his own day (*HW*², p. 48).

¹ This of course is not the form in which the problem presented itself to Reichel. Supposing the body-shield to have lasted to the end of the Mycenaean age, and this to have overlapped the Dipylon period, he took the Mycenaean armature to be that of Homer's own day and naturally expected to find it everywhere in the poems.

forms the background of the *Iliad*, the Siege of Troy. In fact, however, the monuments which Reichel adduced in evidence, to which few that are relevant have been added, come almost entirely from the Shaft-graves, and therefore belong to the sixteenth century B.C.

No actual shield of the period is known, and its absence from the richly equipped Shaft-graves indicates that it was made of perishable material. Direct evidence of the form is therefore lacking, and only that of representations remains; and these again are relevant only if they show the shield in actual use by human beings. The aegis of Athena, the trident of Poseidon (and of Britannia) warn us not to take too seriously the equipment of manifestly divine or heroic figures. Again, the figure-of-eight shield appears throughout the Late Bronze Age as a decorative *motif*, sometimes as a religious symbol, but this tells nothing of its use in warfare. The relevant monuments number something under a dozen and are mainly works of art in precious metal; like almost all objects of artistic merit from the Shaft-graves, they are products of Minoan skill.¹ In the later Mycenaean age the mainland yields no reliable evidence of the continued use of the body-shield. In view of the paucity of the monuments, this might well be regarded as accidental, were it not that in the later part of LH III we have evidence of the appearance on the Greek mainland and also at the east end of the Mediterranean of a new equipment of which the chief features are a small, generally round, shield and a sort of corslet or jerkin which in Greece does not appear to have been of metal.

The evidence therefore points to the disuse of the Shaft-grave equipment at a date after 1500 but before the end of LH III; and if this perhaps rids us of the linguistic difficulties involved in Reichel's theory that the armature of the Homeric poems is exclusively of this type, we are confronted with the historical problem of accounting for its survival at all in a poem whose very prototype cannot have begun to take shape till a date later than that of the Siege of Troy.

The body-shields of LH I are of two kinds, the 'tower' type and the figure-of-eight. The former is straight-sided, rectangular at the lower end, with an arched top to protect the face; in profile it is seen to form a vertical section of a cylinder. Of the curious figure-of-eight form Reichel was the first to give a convincing explanation. This was accepted by Leaf and may be read at length in an appendix to the second edition of his *Iliad* (vol. i, pp. 567 ff.); hence only a brief recapitulation is necessary here. An ox-hide cut to a circular (or, more probably, an oval) shape was stretched over a couple of staves placed at right angles to each other. One, vertical, reached from top to bottom of the shield; it had a convex curve, so that the shield, in Reichel's words, stood out before the bearer like a bellying sail. The cross-stave joined two points on the circumference, crossing the

¹ As the military scenes portrayed find no parallels in contemporary art in Crete, it must be assumed that Cretan artists were carrying out the orders of mainland employers.

upright at a point well above the centre of the shield; but whereas the upright adhered to the hide throughout its length, it seems probable that the horizontal stood off from it for a short stretch at the middle, drawing the sides together and producing in each a deep fold visible when the shield is shown in profile. The surface, instead of forming a section of a sphere, was thus divided into an upper and a lower curve which gave the shield in its frontal aspect an outline rather resembling a figure of eight.¹ The cross-stave was of course also curved, and the shield thus formed a kind of embrasure within which the bearer stood. On the Lion-hunt dagger-blade (Fig. 1, p. 140) shields of both forms are shown slung from the left shoulder by a short telamon. It is a fair inference that we have here the handleless shield about which Herodotus somehow or other had information; for nearly all our representations show both hands of the bearer free, when the shield is in front of his person as well as when it is slung behind his back. The manipulation, if it can so be called, of the shield evidently depended entirely on the telamon.

In detailed representations of the figure-of-eight shield its surface is dappled after the manner of bulls in Minoan and Mycenaean wall-paintings and reliefs,² showing that the hair of the hide was retained. This characteristic, correctly deduced by Reichel from the dark spots on the face of the figure-of-eight shield on the Lion-hunt dagger-blade,³ is established by its recurrence in a number of representations unknown to him, notably in the great shield frescoes of Knossos and Tiryns.⁴ The latter, a work of the fourteenth century at earliest, discovered and published many years before the former, is later by at least a century, for the Knossian example belongs to LM Ia, though it survived until the destruction of the palace c. 1400. None the less, the Tirynthian example is plainly a direct descendant of the Knossian, for the valuable information which both afford regarding

¹ Professor Myres has shown (*Man*, xxxix, March, 1939, n. 36) by the use of small models that an almost similar effect can be obtained without cross-staves, provided that the leather is stout enough, by merely attaching the telamon to two opposite points on the circumference of the hide, and argues that it is unnecessary to assume the use of staves. For the vertical stave, however, there is a fair amount of archaeological evidence (*v. infra*) and the attachment of a cross-stave would be a convenient if not a necessary preliminary to the fitting of the invariable rim.

² Cf. the bull fresco from Tiryns, known to Reichel (Schliemann, *Tiryns*, pl. xiii; *Tiryns*, ii, pl. xviii; Bossert³, figs. 34-5), the fragment of a relief from the Treasury of Atreus now in the British Museum (*P. of M.* iii, p. 197, fig. 135), and a fragmentary wall-painting from Knossos (*ibid.*, p. 213, fig. 144).

³ The inlay of these spots had fallen out, but traces of niello in the cavities make the restoration certain. See Schacht², p. 95, no. 394, pl. xciv, and cf. *P. of M.* iii, p. 119, fig. 70. Reichel's only confirmatory evidence was derived from a few small model shields of ivory and glass-paste, pitted with holes once filled with inlay (*HW.*², p. 4, fig. 9; *JHS.* xiii, p. 22, figs. 5, 6, and 8). To these may now be added the shields on the lid of an ivory box from a tomb in the Zafra Papoura cemetery near Knossos (*Prehistoric Tombs of Knossos*, p. 44, fig. 41), and two depicted on pottery from Knossos (*P. of M.* iii, p. 312, figs. 200 and 201).

⁴ *Ibid.*, pp. 302 ff., pl. xxiii; cf. p. 344, fig. 228; *Tiryns*, ii, pp. 34 ff., esp. 38-9 and pl. v; Bossert³, p. 19, no. 27; *P. of M.* iii, p. 304, fig. 197.

the structure of the figure-of-eight shield tallies in every detail of even the smallest importance. The actual remains are in both cases exceedingly fragmentary, but admit of quite certain reconstruction and together with the other monuments enable us to form a fairly clear idea of the figure-of-eight shield. That it was made of ox-hide with the hairy side out is established by the two frescoes, neither of which shows any trace of a metal facing. It regularly has a rim on which the dappling never encroaches and which may have been of metal or of leather with the reverse side out. The upper and lower parts of the shield are joined by a vertical strip, long, narrow, and pointed at both ends. Reichel (*HW.*², p. 8), who identified it with the omphalos sometimes mentioned in Homer, and Rodenwaldt (*Tiryns*, ii, p. 39) regard it simply as the highest part of the shield's curved surface defined and emphasized and not as anything attached to it; but the fact that it invariably contrasts in colour with the rest of the shield makes this view appear improbable. Now that the Tiryns fresco is found to be merely a late version of the Knossian theme on a greatly reduced scale (the shields of Tiryns being only a little over 2, those of Knossos over 5 feet in height), it is plain that only the Knossian example can be used in evidence. The hatching which Rodenwaldt took to represent hair and which in the Tiryns fresco regularly runs over from the central strip on to the dappled area does not in the Knossian examples extend beyond the strip; the dappled area has a separate system of hatching of its own. On Evans's view the hatching represents an attempt to give depth by shading, and in the case of the central ridge this effect is certainly produced. On small plastic representations of the shield, e.g. on sealings,¹ the ridge is sometimes strongly marked, but owing to the smallness of the scale it would not be safe to argue from the fact. On the whole, however, it looks as if the upright of the shield was protected in its most vulnerable part by an external reinforcement, presumably of leather. In each half of the shield there appears a line of dashes, triple at Knossos, double at Tiryns, which follows for some distance the upper and lower edges of the shield but runs into the sides some way short of the cross-stave. The lines look like stitching; Rodenwaldt supposed them to mark a sort of tuck taken in the leather to increase the curvature. It seems more probable that it represents the stitching by which a second layer of hide, smaller than the outer one, was attached inside to strengthen the central part of the shield. Though at Knossos these lines unexpectedly pass over the ends of the central strip, which at Tiryns they carefully avoid, they can hardly represent anything but stitching, since they are not conspicuous enough to have been introduced merely as ornament; and if the strip is indeed merely part of the surface, no difficulty arises. On the gold plaque-bead of the Duel from the third Shaft-grave (Fig. 5, p. 142) the place of the stitching is taken by a double row of minute bosses which may represent rivet-heads.

¹ *P. of M.* iii, p. 313, fig. 204.

In his interesting discussion of the figure-of-eight shield¹ Evans emphasizes its antiquity in Crete and its religious character, and calls attention to its resemblance to the shield of the goddess Neith. The monstrous size, however, to which the Knossian fresco and the Shaft-grave monuments testify seems to be peculiar to Crete and there to have been general. Even the common soldiers of the well-known Chieftain vase from Hagia Triadha² carry what looks like a simplified version of the huge figure-of-eight shield—an entire hide hung from a stave like a coat-hanger, covering the right side and therefore hung from the left shoulder,³ and reaching from the neck of the bearer to the ground.

The importance which the figure-of-eight shield suddenly acquires in Crete in LM Ia is to be explained on Evans's view by the rise of a new dynasty which embarked on a career of military adventure and destroyed Gournia and other towns of east Crete. It is an interesting fact that its prominence in Crete synchronizes with its appearance on the Shaft-grave monuments, in the only period in which it has any importance on the mainland of Greece.

The tower-shield, which is never represented with the dappled bull markings of the figure-of-eight shield, does not appear to have had any religious associations, and never occurs as a symbol or a motive in decoration; nor is it found after the Bronze Age. It may be doubted if the form is Cretan. A small shield with an arched top on a clay sealing from Knossos⁴ does indeed appear to be a small form of it, that from which perhaps the larger form was developed under the influence of the figure-of-eight shield; but the figure which holds it has a high-peaked cap which gives it an Anatolian air. The shield is carried on the right arm in the impression and was therefore on the left on the signet itself. The signet, as we shall see, gives the true right and left in some of the Shaft-grave examples and it certainly does so here; this shield must have had an *ὄχλον* through which the arm of the figure is thrust. No telamon is represented, which in view of the small scale is not surprising; if we are supposed to imagine one, it can only have hung from the right shoulder on the signet. Though the tower-shield never attains the extraordinary dimensions of the figure-of-eight shield, it was used in the same way, for on the dagger-blade its telamon can be seen depending from the left shoulder, like that of the figure-of-eight shield. It is possible that a form already current on the mainland before the arrival of the Minoan figure-of-eight shield was enlarged and

¹ *P. of M.* iii, pp. 314 ff.; cf. ii, pp. 50 ff.

² Bossert¹, p. 155, fig. 270. Conceivably this form of shield was portrayed in the Minoan source from which ξ 474 and its context are, as it seems, ultimately derived.

³ There is no reason to suspect a reversal of the sides, sometimes found in archaic Hellenic art, e.g. on the Aristonothos vase, where the temptation to represent the blazon of the shield was strong.

⁴ From the Western Repository, period of transition from MM III to LM I₁ (*P. of M.* i, p. 505, fig. 363 B).

adapted to the body-shield tactics. The tower-shield occurs on nos. 1 and 2 of our list' (Shaft-graves) and on 7 (Boeotia, LH III), being thus confined to the mainland until it appears on no. 9, which belongs to LM III and probably to the period of Achaian domination in Crete. Here the form is somewhat modified, a rectangular projection taking the place of the arched top. The shield is plainly suspended by a telamon, but whether from the right or the left shoulder it is impossible to say. As regards right and left, the warrior of the shield was correctly depicted on the signet, his assailant on the impression, the somewhat unskilful artist thus greatly reducing the difficulties of his design.

Though scenes of actual combat involving the shield have not so far occurred in Crete, there are two sealings from Knossos each of which displays a line of marching warriors whose eight-shaped shields cover their right sides.² Logically this would imply that they are hung from the left shoulder, but it is perhaps more probable that they are to be thought of as covering the back, the regular position for shields of ordinary size during a march; in which case the question would remain open. Possibly, however, owing to their great length, they were carried on the side because at the back they would have chafed the ankles. Apart from this uncertainty, sealings and the signets which produce them vary in practice at this period, the true right and left being sometimes assigned to the signet, sometimes to the impression.³ From a number of reproductions of signets from the Shaft-graves (*Schachtgr.*, pl. xxiv) it appears that in this group when motion was in one direction only, as in no. 240, right and left are correctly given on the signet and reversed on the impression. When, as in nos. 241 and 35 (nos. 2 and 3 *infra*) there was a combat and consequently an antithetic grouping, the artist was in a dilemma; he evidently wished to keep the action in the front plane of the design, and may have felt unequal to the task of representing a limb in action in the second plane. In each case the true right is assigned on the signet to the victor, a swordsman; his opponent on 3 and an ally

¹ See next page.

² *P. of M.* iii, p. 313, figs. 304-5. Only the lower half of the first is preserved. For the use of the figure-of-eight shield in a lion-hunt see *ibid.* iv, p. 575, fig. 556. In all three examples the shield is smaller than on the Lion-hunt dagger-blade.

³ For the student further and gratuitous confusion is introduced by the fact that while reproductions are commonly made from the impression because the design shows up better, even modern publications often omit to state what is not always obvious in a photograph, and not evident at all in a drawing. Thus Reichel's figures 2, 5, and 11 are made from impressions without a statement of the fact; the signets themselves are reproduced on pl. xxiv of the *Schachtgräber*. It is unfortunate that Bossert in his account of the excellent plates of 'glyptographs' in *The Ancient Art of Crete* (Bossert) should describe the reproductions as made from plaster 'casts' (p. 33; the term is also used throughout the separate descriptions). It is true that 'cast' is sometimes used of the negative mould as well as of the facsimile of the original object which is produced from it; but surely when the original is a signet, it is more usual as well as clearer to call the mould taken from it an impression. 'Cast' appears also to be used with the sense of 'impression' in the description in *P. of M.* iv (p. 462, with n. 2 and fig. 387) of an agate cylinder seal found in the neighbourhood of Kakovatos. If this is so, we have another example of mainland provenance on which the true right was assigned to the signet.

of his opponent on 2 wield spears grasped in the left hand, that nearest the spectator. It is true that in each case the shaft passes, without regard to possibility, behind the warrior's person; but it is probable that the artist wished rather to avoid cutting across his composition with a straight diagonal line than to indicate that the spear was really held in the right hand.¹ So far therefore as the Shaft-grave monuments are concerned, it would seem that true right and left were assigned on the whole to the signet.²

The monuments, other than the Cretan sealings with marching soldiers already mentioned,³ which show the body-shield in actual use by human beings, are as follows:

1. The Lion-hunt dagger-blade,⁴ with representations of both forms of shield and of the telamon. From Shaft-grave IV. (Fig. 1.)
2. A gold signet-ring,⁵ with representation of a battle in a glen with rocky sides. Tower-shield only. The rocky background is depicted, according to the regular Minoan convention, as suspended from the upper margin. From Shaft-grave IV. (Fig. 2, from the impression.)

¹ So on the gold plaque-bead from Shaft-grave III (*Schachtgr.*, pl. xxiv, no. 33; Bossert³, 398 c) the hero who stabs a lion wields the sword in his right arm, which is in the front plane; the blade passes behind his head.

² This preference for correctness in the signet characterizes other LH I intaglios, e.g. the small figure with the eight-shaped shield on the Goddess ring (*JHS.* xxi, p. 108, fig. 4) from Mycenae holds its staff or spear with the right hand on the signet, and the lion daemons of the Tiryns ring support their libation jugs with the left fore-paw and hold the right poised above the handles (*AM.* lv (1930), pls. ii and iii, signet), Beil. xxx (impression). This stage would naturally come early in the development of the glyptic art and be followed by that in which the intaglio was reversed in order to give a correct impression. Transition from one to the other began early in Crete, for a seal impression of a goddess with lion from the same repository as the god with the small shield gives the true right, since the goddess holds her spear in that hand; and an impression from a gem found in the neighbourhood of Khania shows a daemon with libation vessel correctly given in the same pose as those on the signet of Tiryns (*P. of M.* i, p. 305, fig. 363 a; p. 708, fig. 532). There is nothing improbable in the hypothesis that the signets of Mycenae and the example from Tiryns are the work of a small group of Cretan artists, perhaps a single family, who settled on the mainland and lost touch with the development of their art in their native island.

An electrum signet from a chamber-tomb at Mycenae (*Furtwängler, Antike Gemmen*, iii, p. 36, fig. 14; *JHS.* xxi, 1901, p. 175, fig. 51; *P. of M.* iii, p. 464, fig. 324) representing a scene of betrothal or espousal between the Great Goddess and her young consort presents the same problem of antithetic grouping as a scene of combat and solves it in the new manner. Here the true right is assigned to the superior figure (the Goddess) on the impression. The ring, which was found in the immediate neighbourhood of the Shaft-graves, is to all appearance slightly later than the latest of the depositions in the Grave Circle. See H. Thomas, *BSA.* xxxix, pp. 65 ff. The spear which the young god had naturally at this supreme moment shifted to his left hand appears on the impression in his right, but the shaft is concealed behind his body, surely for purely aesthetic reasons. Its whole length was apparently first punched out, but a section in the middle was subsequently almost obliterated by the deeper modelling of the chest.

³ One other Cretan example calls for mention, that depicted on a LM II vase from a grave at Isopata (*Tomb of the Double Axes*, p. 27, fig. 37) which has a helmet on its other side. Both certainly represent the equipment of the deceased, but the picture of the shield adds nothing to our knowledge.

⁴ *P. et C.* vi, pl. xviii; *K.i.B.*, plate facing p. 84, in colour. *Schachtgr.*, pl. xciv, p. 95, no. 394, where references are given to earlier publications. *Cl. P. of M.* iii, pp. 118 ff.

⁵ *Schachtgr.*, pl. xxiv, p. 74, no. 241 and *P. of M.* iv, p. 551, fig. 511 bis, give reproductions of the signet.

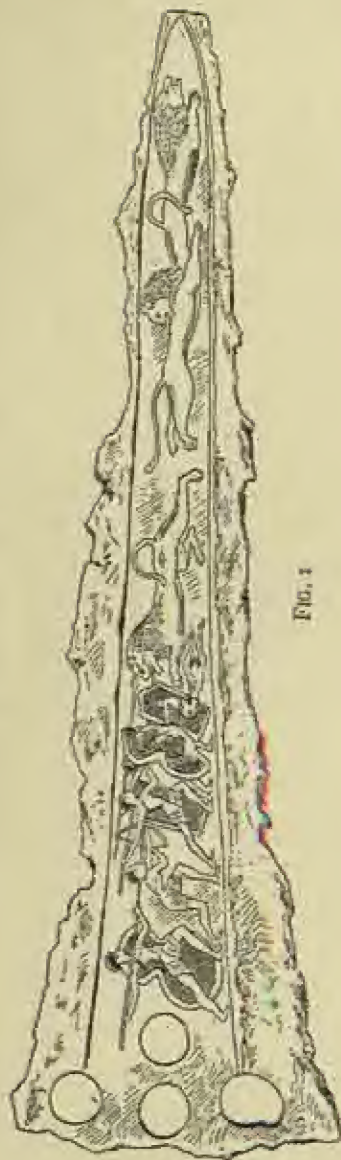


FIG. 1



FIG. 2

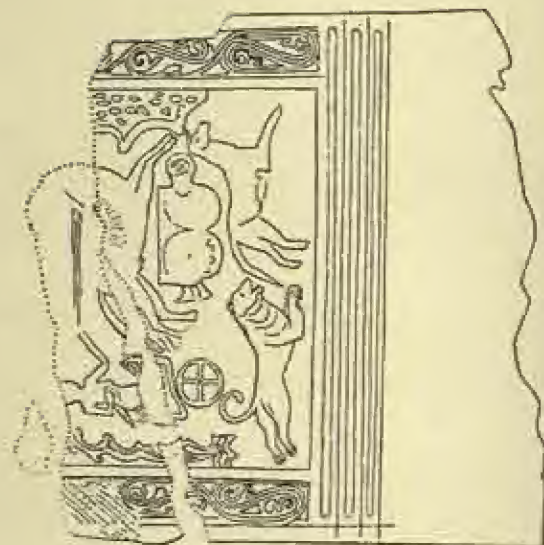


FIG. 3

3. A gold plaque-bead.¹ Scene, a duel, in which a man armed with a rapier stabs his opponent over the top of a huge figure-of-eight shield. From Shaft-grave III. (Fig. 5, from the impression.)
4. A sardonix² on which a combatant armed with a rapier stabs his opponent. Both parties have figure-of-eight-shields flung behind their backs. From Shaft-grave III. (Fig. 6, from the impression.)
5. The fragments of a silver rhyton³ showing the lower part of a warrior ascending rocky ground and of a figure-of-eight shield slung behind him. Probably from a siege scene. From Shaft-grave IV.
6. A sculptured stele⁴ found *in situ* above Shaft-grave V (Fig. 3). On it a chariot is represented driving over a small figure prostrate under a figure-of-eight shield. This is the only representation of a body-shield from the Shaft-graves which is of undoubtedly local and native workmanship, and even here Minoan influence is marked, e.g. in the rock-work of the sides. The victorious warrior in the chariot has no shield, and it is noteworthy that this typically Minoan form is carried by his victim. It is unfortunate that no explanation of this unique monument can be other than speculative. The lord of Mycenae may have commemorated on his tomb a successful attack on Crete or the repulse of an attack on the mainland by Cretans. On pieces of a silver vessel from Shaft-grave IV eight-shaped shields carried in action can be discerned, but are too fragmentary to yield further information.⁵

This completes the list of representations of body-shields from the Shaft-graves; for though Reichel reckoned among his tower-shields the articles worn by the spearmen on the silver Siege vase from Shaft-grave IV (Fig. 4),⁶ they are not relevant to the present inquiry. In the first place there is some doubt whether they are shields or cloaks, and if they are shields, they are hardly large enough to be classed as body-shields. In the opinion of the present writer they are somewhat enlarged versions of the shield with the arched top on the Knossos sealing noted above and are supported by a telamon, but whether it passes over the right or the left shoulder there is nothing to show. What in Reichel's reproduction looks like a telamon over the left is in fact only the end of a long crack, as can be seen in the reproduction in *Schachtgr.*, p. 107, fig. 35. There is no reason to regard the wearers as either Minoans or Mycenaeans, but they may well be Anatolians. Nor is it necessary to consider one or two sealings on which a hero protected by a figure-of-eight shield engages in single combat with a lion rampant, since these are obviously scenes from myth and not from actual life, and in any case they add nothing to our knowledge of the shield.⁷

¹ *Schachtgr.*, pl. xxiv, no. 35 (signet), pp. 49 and 177, fig. 37 (impression).

² *Ibid.*, no. 116 (signet), p. 59, fig. 14 (impression).

³ Rodenwaldt, *Der Fries*, p. 26, fig. 15.

⁴ *Schachtgr.*, pl. vii, p. 35; *BSA.* xxv, pl. xix, p. 128.

⁵ *Schachtgr.*, pl. cxxxi.

⁶ *HW.*,² p. 13, fig. 17.

⁷ *Ibid.*, p. 2, fig. 4; *P. of M.* iv, p. 575, fig. 336.

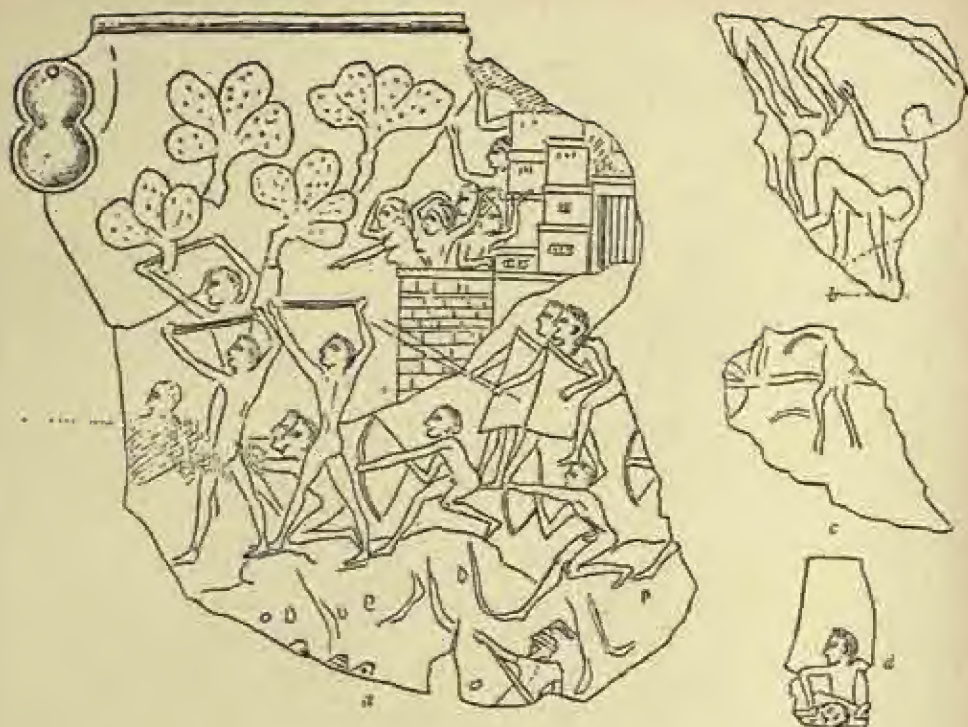


FIG. 4



FIG. 6



FIG. 5

Two monuments, however, on which the shield has undoubtedly a religious significance cannot be passed over. The first is a Minoan or Mycenaean engraved amethyst of unknown provenance and uncertain date in the British Museum (Pl. II, 1).¹ The material, hard, brittle, and ill adapted to engraving, on the whole indicates an early date. Engraved amethysts begin in Crete in MM II and continue, though sparsely, in MM III.² One was found in Shaft-grave III,³ another, probably to be dated to LH II, but not later, in a chamber-tomb at Mycenae;⁴ another in a similar tomb at Prosymna with objects dating to the end of LH I.⁵ Though beads of amethyst are not uncommon in LM III graves in Crete, they are hardly to be found in Greece in LH III,⁶ and amethyst, never a favourite material, seems no longer to have been used in Greek lands for engraving. On the whole therefore, though Kukahn's confident 'MM III/LM I'⁷ goes beyond the evidence, a date earlier than LH III seems probable. The device on the gem consists of what appears to be an armed figure; no contemporary evidence can be cited in support of the alternative interpretations of a military trophy or a decorative arrangement of arms. A large figure-of-eight shield is surmounted by a helmet; the absence of a head by no means proves or even suggests that a living being is not intended, for in these minute representations it is not uncommon to find the head omitted or barely indicated if sufficiently vouched for by a head-dress.⁸ The arms are extended and each hand grasps a pommel-hilted rapier; feet are indicated below the shield. The helmet has Mycenaean affinities,⁹ and the militant rather than protective character of the divine being behind the shield also suits the mainland rather than Crete.¹⁰ In fact the only parallel for this figure is afforded by our second monument, which was found in a LH III house at Mycenae, viz. a limestone tablet on which is painted the figure of a goddess similarly masked by a figure-of-eight shield and flanked by a

¹ *Brit. Mus. Quarterly*, x, 3, p. 123, pl. xxxiv, 2.

² *P. of M.* i, pp. 273 and 673.

³ *Schachtgr.*, p. 59, no. 117.

⁴ *ChT.*, p. 202, pl. xxxviii, no. 66.

⁵ *Blegen, Prosymna*, pp. 273-4, fig. 579.

⁶ *ChT.*, p. 208.

⁷ *Der griechische Helm*, p. 1, II. 6.

⁸ *JHS*, xxii (1902), p. 79.

⁹ It is possible that the objects under the outstretched hands are also helmets. They bear a curious resemblance to that on a denarius of Julius Caesar struck in Gaul c. 50-49 B.C. (*P. of M.* ii, p. 794, fig. 518) and are not unlike one on a bronze situla from Carniola (*HW*,³ p. 108, fig. 46).

¹⁰ It is true that a carnelian bead-seal from Crete (*P. of M.* ii, p. 793, fig. 517) exhibits a female figure, presumably divine, which brandishes a pommel-hilted sword: it has, however, neither shield nor helmet. A sealing from Hagia Triadha (Levi, 'Cretule di Hagia Triadha', *Annuario*, viii/ix, p. 124, fig. 157), shows a late, bad, and ultra-conventional design of two rudely indicated figures wearing figure-of-eight shields. The heads are mere circles. In spite of the lack of parallels for an armed divine pair, it seems more likely that the figures represent Palladia than human beings; but, late and without Cretan predecessors, they do not suggest a Minoan origin for the militant goddess. The undoubted appearance of a goddess with so many of the characteristics of the Homeric Athena on the tablet of Mycenae is of great interest, which will be increased if it is possible to trace the cult back to the Shaft-grave period.

pair of female worshippers (Pl. I).¹ This strongly suggests that the figure on the amethyst is female and divine.

To resume our consideration of the shield in human ownership, there remains a monument (7) from the mainland, a gold ring from Boeotia which on grounds of style is ascribed to LH III (Fig. 7).² As it presents several peculiarities, it will be convenient to consider it in conjunction with 8, a roughly contemporary, i.e. LM III, engraved gem from Crete (Fig. 8).³ The subject of 7, a duel between spearmen, is unique. The shields which the pair wear slung before them are tower-shields, but their multiple rims and the number of small bosses distributed over the surface are novelties. It is true that the tower-shield of fig. 2 has in its upper half a



FIG. 7



FIG. 8

number of incised dots, which in the reproductions look like bosses, arranged horizontally in a long oval; but on the Boeotian ring they are distributed over the whole surface, on the right (to speak in terms of the reproduction, i.e. of the impression) irregularly, on the left grouped concentrically within and without, a couple of engraved circles which rather recall the outline of the figure-of-eight shield. A large boss projecting from the face of the right-hand shield some distance below the middle has no parallel anywhere. The cruciform ends of the sword-scabbards are unique; and so is their position between the owners' legs. In none of the Shaft-grave examples is any combatant armed with both spear and sword, nor are two shields exhibited in any design save that of 4, where, slung behind the combatants' backs, they make an effective background for their figures. Nor does there appear to be any other scene of battle in which the issue is uncertain; there is always a manifest victor with whom the owner of the signet no doubt identified himself.

The Shaft-grave artists readily omit detail in the interest of beauty and clarity of design. It is a departure from their practice that the spear of the right-hand man is shown crossing his shield, and this is the worst part of

¹ Bossert², 43.

² *JHS.* xlv (1925), p. 26, fig. 30. From an impression. The ring, now in the Ashmolean Museum, was bought in Greece.

³ F. and L., *Texts*, pl. E, 30; *HW.*, p. 4, fig. 12.

⁴ These dots do not appear in Fig. 7, *supra*. They are indistinct in Schachtgr., loc. cit., and can be best seen in *P. of M.*, loc. cit.

the design. The shield forms the highest part of the relief and the spear is little more than a line which ascends and descends its slope, conveying no impression of rigidity or strength. In this respect the Boeotian ring compares unfavourably with 8, the unpretentious carnelian from Crete, on which the spear of the right-hand man (to speak in terms of the impression) also crosses his shield; the latter is kept low and flat, and the spear stands out well from it. Its head, actually in the second plane, is brought up nearly to the first by the prominent cross-nails which pass through the socket.¹ On the other hand, the design of the Boeotian ring has some curious points of contact with the Battle in the Glen. The rocky background hangs from the upper margin, though below it has been replaced by a conventional border. Again in terms of the impression, the left-hand man on both grasps his spear with his right hand, and the shaft passes behind his person; the right foot of each, shown in profile, points away from the centre. On further scrutiny, however, we see that on the Shaft-grave ring, though the left leg is concealed by the shield the warrior must rest on his left knee; he props himself with his right foot, which, to show the contrary direction of the thrust, points outward. The man on the Boeotian ring stands on both his feet, the right pointing outward, the left towards the centre, a position for which I know no parallel.² The spear of the shield warrior on the Shaft-grave ring has several small objects attached to it which Karo (l.c. *supra*) thinks may be pennons (*Wimpeln*); its shaft is single. The Boeotian spears have double shafts, held together at intervals by lashings with projecting tags. This may of course be a traditional *motif* obscurely rendered on the Shaft-grave ring, but one would like more evidence for composite spear-shafts in the Bronze Age. It is true that certain spears are called *καλλίερα* and *καλλήτων* in the *Iliad* (O 389 and 678) and were presumably composite; they were, however, huge spears for sea-fighting,³ one of which is described as of 22 cubits, double the length of Hector's. Greater length as well as strength could be secured by means of a composite shaft. Apart from this ring, however, there is no evidence for the practice in the Bronze Age.

With all due allowance for the small number of monuments available, for the difference of locality and the presumed difference of date, the number of Shaft-grave and other peculiarities concentrated in the Boeotian ring is considerable, and reminds us that nothing is or can be known of its true origin. It may be a forgery; if it is genuine, the artist seems not so

¹ Cf. the single cross-nails in the sockets of the two bronze spear-heads from Tomb B at Moulisani (*Eph. Arch.*, 1904, p. 30, fig. 7, and p. 46, fig. 11).

² It would, however, be unwise to stress a single abnormality. The frontal aspect of both feet of the young god on the Retrothal ring seems also to be without parallel. *P. of M.* iii, p. 464, fig. 324.

³ Spears (single-shafted) are sometimes shown stacked in the bows of ships on vases of the Late Geometric and archaic periods: A. Koehler, *Das antike Seewesen*, fig. 25 (Late Dipylon), figs. 31 and 32, facing p. 87 (archaic; Corinthian clay tablets).

much to have followed unconsciously a well-established tradition as to have copied deliberately certain features from a LH I model, in which case the value of the ring as yielding evidence for contemporary armature is obviously greatly diminished.

Turning to 8, we find the subject of 3, viz. shieldless swordsman against spearman with shield, but with modifications. 7 followed in the matter of left and right the tradition of the Shaft-graves; on 8 the figure of the victorious swordsman is calculated, not for the signet, but for the impression, on which the sword arm is correctly given. The scabbard is wrongly suspended from the left shoulder, but this is probably deliberate, for it enables the artist to show it behind the owner's back, where a vacant space has to be filled. His opponent's spear is inevitably held in the left hand, but unlike the engravers of 7 and 2 the artist will not let it pass, impossibly, behind the figure, and, as has been said, the manner in which he brings it across the shield is competent and effective.

The latest scene in which the eight-shaped shield appears carried by a human being is engraved on a seal-stone of grey steatite (no. 9) found in a chamber of a tomb in the Mavro Spelio cemetery of Knossos.¹ The latest of the grave-goods, among which the seal-stone must be reckoned, belong to LM III. The device looks like a degenerate version of the LM Ia sealings from Knossos noted above, for it consists of two marching soldiers whose left sides are covered by eight-shaped shields; the chief difference is that on the impression the men march to the left, i.e. the directions of signet and impression as observed on the earlier sealings are reversed. The workmanship is inferior, and the shields look as if they had been copied or derived without understanding from a small model, presumably glyptic. They consist of two separate disks united by a vertical bar; a curious point is that the most distinctly rendered of the disks bears a marked resemblance to a type of round shield which becomes familiar later, that, namely, which has a central boss and others arranged in a circle round the rim.² This example can hardly be regarded as evidence of the contemporary use of the eight-shaped shield in Crete.³

Turning to the new type of equipment which appears in Greece in LH III, we find examples furnished by:

1. The Warrior vase (Pl. III, 1 a and b),⁴ found at Mycenae in a house of the LH III period. The two sides of the vase apparently represent different stages in one story. On the obverse, which is comparatively well preserved,

¹ BSA. xxviii, pl. xix, vii B 5 and p. 283.

² They bear, however, a striking resemblance to shields on a group of clay sealings from Hagia Triadha, ascribed to the period MM III/LH I; see p. 143, n. 10, *supra*. The design, crudely executed, consists of a pair of figures, full face, standing each behind a figure-of-eight shield, which consists of two equal circular parts (*Annuaire*, viii-ix, p. 124, fig. 132).

³ The object depicted on a painted larnax of LM IIIB date from a chamber-tomb at Milatos (*Prehistoric Tombs of Knossos*, p. 99, fig. 107), though probably intended for a figure-of-eight shield, is not relevant here, since the figure to which it is attached is divine.

⁴ Original publication, on the actual scale, in F. and L., pls. xlii and xliii.

a line of marching warriors advances from left to right; on the extreme left a woman stands in an attitude of lament for their departure. On the badly damaged reverse another line of soldiers very similarly equipped but wearing helmets of a different type advances into action, their spears poised for action. Though they march in the same direction, they are presumably the foe whom the men of the obverse have come out to meet and are represented in the act of engaging them. There are many points of interest in the armature depicted which will be dealt with under the appropriate headings; at present we are concerned with the shields alone. Those on the obverse are of a roughly circular shape with a segment cut out of the lower edge. The skill of the artist was not equal to showing how they are kept in position; they cover the bearer's left, displaying the inside to the spectator, but there is no hint of left arm, hand-grip, or telamon. The men on the reverse have shifted or are shifting their shields into the frontal position required in action; on the rearmost shield a small hand-grip has come into view. We shall find by comparison with the Peoples of the Sea on Egyptian monuments that the normal shield in the east Mediterranean area about this date had a single, more or less central hand-grip and a telamon,¹ and may safely supply the latter here; indeed, the unused hand-grip implies the presence of a telamon. It is impossible to say whether the shields of the two parties are intended to be of the same type or not. The fact that the inside border visible on the shield with a hand-grip is identical with that of the shields on the obverse suggests that they may be; on the other hand, comparison with the shields of the Warrior stele (no. 2 *infra*) leads rather to the hypothesis of a round, bulging, basin-like shield, whose existence in the Near East in the Early Iron Age is well attested.² For the shield of the obverse no precise parallel is known, either in the Bronze Age or later. The resemblance to the Thracian pelta is, however, fairly close, and that this form was chosen by Mikon, decorator of the Poikile Stoa and the Theseion, for his Amazons (as we may infer from its appearance with them on a group of red-figured vases of appropriate date)³ shows that the Athenians associated it with Anatolia. They were right, for Pompey's army encountered it in the region south of the Caucasus, but found no bodies of women among the slain.⁴

¹ The University of Chicago Oriental Institute Publications; *Medinet Habu*, I, pl. 34 and pl. 50 c and d; for the Pulesati alone Meyer, *O. A. A.* II, 12, pl. vi.

² e.g. they are used by the defenders of a city besieged by Assyrians on a relief from Khorsabad (Botta, *Mon. de Ninive*, II, pls. 92 and 100). They also occur among the miniature bronze votives from Lalysos (unpublished).

³ *MuZ.* III, figs. 305, 506, 508 a, and 509. To judge by the majority of the representations, the shield was rimless (cf. Hesych., s.v. *πέλτα*) and had a single hand-grip, and probably it was consistently represented in this way by Mikon; the vase-painters sometimes give it a rim, *σάρον* and *ἀντάβη*. Sir John Myres (*Mon.* xxxix, p. 3) offers an extremely ingenious explanation of this unique form as it appears on the Warrior vase. Stressing the fact that the border breaks off and does not appear on the lower margin, he argues that what we have is the eight-shaped shield folded along the transverse crease (where he assumes the rim to have been interrupted) for convenience of transport.

⁴ *Int. Vit. Pomp.* xxxv.

2. The Warrior stele (Pl. II, 2),¹ a limestone slab, which was found over an interment pit in a chamber-tomb of the latest type at Mycenae. Originally it bore a conventional design in shallow carving; subsequently it was coated with stucco and decorated with paintings. Broken and diverted from its original use, it must be somewhat earlier than the interment with which it was associated. Only the painting concerns us, and only that register which depicts a line of warriors marching to the right. Even at the time of the discovery the paint was badly faded, but on the reproduction then made it is possible to see that the figures are virtually replicas of those on the reverse of the Warrior vase. In attitude they are identical with them; like them they wear fringed chitons, and when the paint was in better condition it was possible to see that one of them at least had a ridge-crest helmet. Obviously the two paintings are derived from a common original. According to a plausible conjecture this may have been a fresco in the Palace of Mycenae; the vase at least conveys the impression of a model on a fairly large scale. It cannot have decorated the megaron; the only fragments recovered there—and they represent the paintings which were there on the day of the destruction—are painted in a purely Minoan style of which the vase and the stele show no trace, and the equipment of the warriors depicted, fragmentary but capable of reconstruction, is quite different.² This is also true of the kindred fresco fragments which were found in the approach to the megaron;³ but other parts of the palace may have been less conservatively treated. A common original in any case there must have been; and it must have been somewhat earlier than the vase and stele.

3. A sherd, also from Mycenae⁴ and of the LH III period, on which is represented part of two warriors in a chariot, each wearing a fringed chiton and carrying a round shield (Pl. II, 3).

There are also two sherds from Tiryns of which the first at least belongs to the very latest phase of LH III. They are:

4. A sherd with figure decoration⁵ which, though far more barbaric than the Warrior vase, is still faintly reminiscent of the fresco style. The design, part of a battle scene in which a chariot is engaged, includes two warriors on foot each of whom wields a very small round shield by a central hand-grip (Fig. 9).

5. A sherd on which is a horse's head and part of the figure of a man holding out a round shield in front of him, obviously by a hand-grip.⁶

This appears to be all the monumental evidence which the mainland affords of the armature current in LH III.⁷ The gateway and postern of

¹ *Eph. Arch.*, 1896, pl. i.

² Rodenwaldt, *Der Fries des Megarens von Mykenai*, Beilagen i-iv.

³ *BSA.* xxv, pl. xxvi b and xxvii.

⁴ Schliemann, *Tiryns*, pl. xiv.

⁵ F. und L., pl. xli, no. 427.

⁶ *Ibid.*, p. 353, fig. 153.

⁷ A sherd from Mycenae on which is represented a man with shaven upper lip and wearing jerkin and leggings like the warriors of the vase may perhaps also owe its inspiration to wall-

Tiryns, however, show that fairly early in that period fortifications were planned to make an attacking force expose its right side to the defenders; the natural conclusion is that shields were slung from the right shoulder and wielded by the left arm.

In the first phase of the fortifications of Tiryns, early in LH III, the main gate lay in the line of the east section of the northern fortification wall and had in front of it a terrace on which it was possible for an attack-

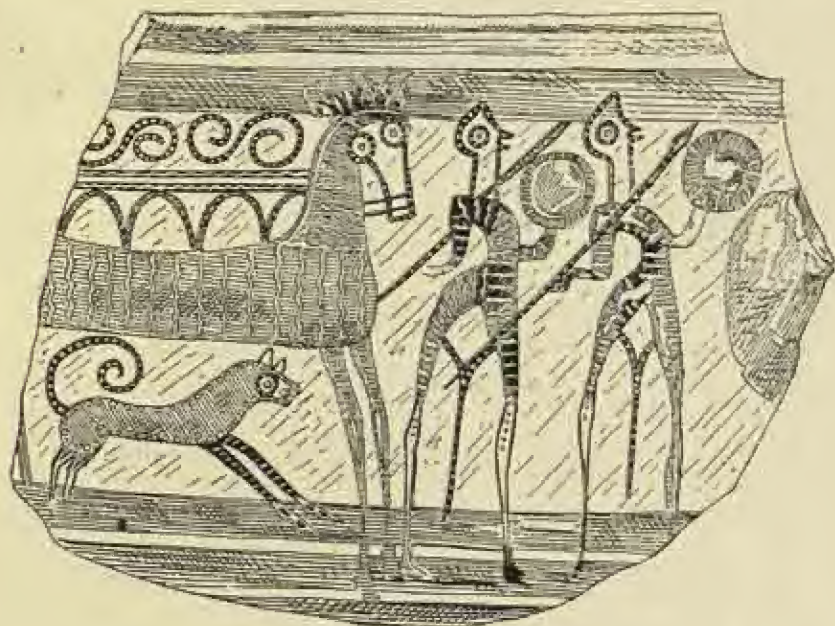


FIG. 9

ing force to collect before launching their assault. In the earlier part of the second phase (IIa; see next page, n. 1) this defect was remedied. A new section of the wall was built farther east, so as to enclose most of the terrace, and carried on to overlap the original wall at the beginning of its westerly part, thus forming a short stretch of enclosed roadway. The gate was now set across this, some way northward of its previous position and at right angles to the enclosing walls. The only approach to it was no longer from the east but from the north, by a ramp running immediately under the city wall, to which an attacking force would necessarily present its right, and therefore, presumably, its undefended side. This defence was further elaborated.

painting. The man is occupied with a horse which was probably attached to a chariot. As Rodenwaldt points out (*op. cit.*, pp. 24-5 and fig. 14), the *motif* appears in the fresco referred to above in note 3 on the preceding page, where it is treated in Minoan style. The number of representations of the new equipment makes it fairly certain that the wearers are natives and not enemies or foreign allies of the Mycenaean.

probably at no great interval of time. The east wall was prolonged still farther northwards so as to enclose most of the ramp and take assailants between two fires. This stage (IIb) precedes the period (III) of the great extension of the enclosed area and the most spectacular elaborations of the defences. Though precise dating is impossible, it seems certain that IIa comes high up in the thirteenth century, if not within the limits of the fourteenth.¹

The quarter from which the new armature came to Greece cannot be precisely determined, but there is no doubt that its origin or at least an early habitat was in the Near East, and some probability that the immediate point of departure was in Anatolia.² The round shield has a wide range and was early diffused in this region. The first datable example occurs as one of the signs on the famous disk of Phaistos, c. 1600, where it is represented with a central boss round which six others are arranged in a circle. Another sign appears to denote a round shield with a central hand-grip seen in profile.³ The disk is certainly not Cretan; there is a possibility that it is Lykian.

Towards the close of the Bronze Age the same type of equipment was in use all over the Levant. The Hittites at the battle of Kadesh (c. 1288) are represented by Egyptian artists as wielding small, though not round, shields by a single hand-grip.⁴ On the monuments of Ramises III the most conspicuous of the Peoples of the Sea, the Shardana and Pulesati, are uniformly represented with round shields with single hand-grips. It is true that the region whence they came is unknown. With the Pulesati as the Philistines of the Old Testament we have some later acquaintance, and there is some reason to think that a section of them had sojourned in Crete before they arrived in the country which still bears their name.⁵ The

¹ See the account of the excavator, Professor K. Müller, *Tiryns*, iii, p. 64, with fig. 43 (p. 64) and pl. 4, and for the chronology pp. 207 ff. For the greater part of the final approach to the Lion Gate at Mycenae assailants would have their left side to the wall, but here the line of the wall is entirely determined by the lie of the ground. In the last stage of all they would be taken between two fires, exposing their right sides to the defenders on the great flanking wall on the west (*BSA*, xxv, p. 9, fig. 1).

² The fringed tunics of the Warrior vase and stele are an Oriental feature; so are the horned helmets on the former. In this, as in all similar cases, there is the possibility of Near Eastern influence reaching Greece via the Mycenaean settlements now known to have existed at various points on the Ionian and Syrian coast. Nor is the possibility limited to the points at which we know that there were settlements. The alleged Anatolian origin of the Pelopid dynasty should not be forgotten.

³ *P. of M.* i, pp. 647 ff., fig. 482 (face A of the disk), fig. 483 (synopsis of the signs). The two signs referred to in the text are nos. 12 and 17 in the synopsis.

⁴ Meyer, *G. d. A. li.* 12, pl. iv (after *Fremdschkerphot.* 280-2); Helbig, *HE.* 3, pp. 132-3; Nuoffer, *Der Renningen im Altertum*, pl. i, both after Rosellini. The shields are sometimes rectangular, more often slightly rounded at top and bottom, with incurving sides; these latter have a certain, though superficial, resemblance to the 'Boeotian' and 'Dipylon' shields of Greece. They twice appear on the reliefs commemorating Kadesh in the hands of non-Hittite warriors, *Fremdschkerphot.* (Luxor), no. 425; Meyer, loc. cit., pl. v.

⁵ Hall, 'Kestiu', in *Essays in Aegean Archaeology presented to Sir Arthur Evans*, pp. 32-3. The evidence on which it is proposed to connect them with Lykia (viz. that they wear a feather

Shardana had encountered Ramses II at sea and been defeated by him early in his reign; he formed a corps of them which fought under Egyptian command at the battle of Kadesh (Pl. IV, 1). Philistines and Shardana combined in the formidable attempt upon Egypt c. 1194 which was repulsed and commemorated by Ramses III; their homeland therefore must have been situated in a region affected by the collapse of the Hittite empire and the settlement in Anatolia of European invaders; and as they arrived in ships, they can hardly have come from any locality other than the shores of the Aegean, its islands, or the south coast of Anatolia. The fact that save for their headgear their equipment is identical suggests that there had been previous association between the two peoples.

Yet one more monument remains to be considered, and that from a quarter of peculiar interest. In the fourteenth century the island of Cyprus had been colonized by Mycenaeans, from which time until the end of the Bronze Age its culture was substantially Mycenaean, though not without an admixture of alien traits. On an ivory mirror-handle from a Bronze Age tomb at Enkomi (Pl. II, 4)¹ we find represented an equipment almost identical with that of the Shardana. It is worn by a hero engaged in mortal combat with a griffin, but equipped with the arms of contemporary life. Sword and helmet find their closest parallels in the Mycenaean world; but the hero also wears a piece of armour of a type unknown in Greece,² which without the aid of Egyptian monuments might not be recognized for what it is, viz. a form of corslet characteristic of the Pulesati and Shardana.³ His shield is in essentials identical with theirs and with one of the forms we have found at Mycenae; it is round, it is worn slung on a telamon which allows it to be flung behind the back, and it may be presumed to have a single hand-grip. The mirror-handle may well be an import from Ugarit or some other Syrian town and must not of course be assumed to show what was worn in Cyprus. Turning to the reliefs of Medinet Habu, we find that Shardana and Philistine alike carry sword or spear in one hand and manipulate a round single-grip shield with the other (Pl. IV, 2).⁴ It is true that on a relief at Abu Simbel on which the battle of Kadesh is commemorated the four Shardana guards of Ramses II might be thought to afford evidence for the existence of both arm-band and hand-grip on a round shield dotted with bosses, for so they appear in a series of reproductions of which it is sufficient to cite here *HE.*⁵ p. 324, fig. 124. Breasted was the first to point out that not only does the relief in its present condition

crown as—possibly—do the heads on the Phaistos disk, which comes—possibly—from Lykia, and as did the Lykian contingent in the host of Xerxes) is of the flimsiest, but the conclusion may nevertheless be right.

¹ *Exc. in Cyp.*, pl. II, 872 A.

² For the possibility of its appearance in Crete see *P. of M.* IV, pp. 303 ff.

³ *v. infra*, 199 f.

⁴ The University of Chicago Oriental Institute Publications: *Medinet Habu*, I, pl. 34. A Philistine and a Shardan ask for quarter; the former holds his shield, the latter has it slung behind his back and grasps a sword. For other representations of the Shardana, cf. pl. 30 c and d.

(Pl. V) offer no evidence of these features (a fact which might be due to the subsequent fading of the paint), but that the good preservation of the figure selected for reproduction and especially of the central hand-grip makes it virtually certain that both the arm-band, in any case suspect from its strange position near the rim instead of at the centre, and the bosses with their curiously irregular distribution are the purely imaginative creation of the draughtsman of Rosellini, from whose original publication the current reproductions are derived.¹

There is no evidence that any shield of the Bronze Age ever had an arm-band. It is true that both Pulesati and Shardana are often represented as carrying the shield on the arm in a position in which it could not possibly be maintained by the telamon;² but a sufficiently large central hand-grip could and evidently did serve as temporary arm-band on occasion.³ This is made plain by the fact that in some instances the bearer's hand grasping a spear protrudes well beyond the rim of the shield; there is no question of a second hand-grip here or in any other representation of the Shardana. That the same statement applies to the Pulesati Helbig in an important study of the shield with a single hand-grip⁴ affirms on the authority of distinguished Egyptologists. On Egyptian monuments the telamon was probably generally represented in colour which has now faded; it may sometimes have been omitted. On a relief, however, in the Ramesseum⁵ at Abydos the telamon of a Shardan shield is shown in relief.

This review of the archaeological evidence, scanty as it is, justifies the following conclusions: Within the limits of the Late Helladic age—i.e. between c. 1600 and c. 1100—we have in Greek lands two systems of armature. The first is the body-shield type, the evidence for the actual use of which in warfare comes principally from the mainland and very largely from the Shaft-graves, and therefore dates for the most part to the sixteenth century. In view of the apparent cultural continuity, complete so far as our material allows us to judge throughout the sixteenth and fifteenth centuries, this type may be presumed to have lasted till at least c. 1400, when with the fall of Knossos that Minoan influence which in the two preceding centuries is conspicuous on the Greek mainland comes finally to an end. The old equipment, however, probably lasted a little longer, for the King's Tomb at Dendra, which dates round about 1375, contained no article of military significance that might not have come from the Shaft-graves; in particular the sword, which is well represented, remains unchanged. In the Argolid the latter half of the Third Late Helladic

¹ Reproduced Pl. VI, 1.

² *American Journal of Semitic Languages and Literatures*, xxiii (1906), pp. 1 ff., figs. 1 and 2. Fig. 1 reproduces a photograph of the relief as it is, fig. 2 Rosellini's rendering.

³ See Pl. IV, 1 and cf. the Cretan sealing, *P. of M.* i, p. 505, fig. 363 b.

⁴ 'Ein homerischer Rundschild mit einem Bügel', *Öst. Jahreshfte*, xii (1909), pp. 1 ff.; for the statement about the Pulesati see *ibid.*, pp. 39-40.

⁵ *Fremdvölkerphot.* 404.

period yields evidence, meagre but concordant, of a new equipment of which the chief feature is a relatively small, generally round shield combined with a corslet perhaps of felt or leather, at any rate not of metal; and contemporaneously we find a similar, though not identical, equipment worn by armed forces, probably in part at least of Anatolian, in some cases possibly of Aegaeon, origin, operating at the east end of the Mediterranean. This suggests that for the inhabitants of Greece fighting had become a more cosmopolitan affair, demanding some standardization of equipment, as might well happen once Mycenae had surmounted whatever obstacles had barred her way to the East. The tactics of the eight-shaped shield could hardly have been used successfully against the massed chariot-charges of Egyptians or Hittites; it is therefore unlikely that it would be retained by a state which had settlements in Cyprus, on the Syrian coast, and in Egypt, and must have been acquainted in some degree with the most advanced tactics and equipment of the day. There is no evidence that the body-shield was carried to Rhodes or Cyprus,¹ though in the absence of military scenes from the vase-painting of these regions, negative evidence is not of much account. It is more significant that in the Mycenaean settlement at Ugarit a foundry was turning out before the end of the fourteenth century, possibly as early as 1350, swords which imply a method of fighting wholly at variance with that imposed by the body-shield. It is safe to conclude that after 1300, if not 1350, the body-shield never figured in any serious fighting, even within the limits of the Aegaeon area.²

The sub-Mycenaean phase, brief and transitional, is succeeded by the proto-Geometric culture. This period, till recently barren of monuments bearing on the history of the shield, has now yielded evidence of first-rate importance; as it was found, however, in mainland Greece, we may turn aside for a moment to note a unique monument from Crete, viz. a proto-Geometric vase which bears the only representations of the human figure so far known in proto-Geometric painting (Fig. 10).³ It was associated with the

¹ It is possible that this statement may require modification in view of a monument of great interest and importance found on Delos by the French excavators. This is a carved ivory plaque, probably part of the decoration of a box, on which a warrior is represented with the Minoan-Mycenaean equipment of boar's tusk helmet and loin-cloth supported by a girdle, while a great figure-of-eight shield forms a background for his figure. It is impossible in the reproduction to see any trace of the telamon which must have supported it: the bust, however, is somewhat damaged. The Minoan features recall the Minoan ivory goddess found in the port of Ugarit (Bossert¹, 303), and should it prove possible to assign to the warrior a date in the Bronze Age, Ugarit would be a strong candidate as his place of origin. The subject, however, is at least as likely to be derived from a work of art as from the observation of contemporary life. The plaque is reproduced on the cover of the new American periodical *Archaeology*, Summer Number, 1948.

² The Boeotian gold ring discussed above, apart from the fact that its authenticity cannot be established, cannot be used as evidence for the survival of the body-shield in Boeotia, since the intaglio, if genuine, appears to be archaistic in several respects. On the assumption, accepted in many quarters, that the 'Boeotian' shield is derived from the Bronze Age figure-of-eight, it is curious that the only appearance of the body-shield in Boeotia should be in the 'tower' form.

³ *Eph. Arch.* 1904, pl. iii.

cremation deposit in the sub-Mycenaean miniature tholos (A) at Mouliañá and bears on each side the representation of a man, presumably the deceased, on the one side engaged in the hunt and on the other armed and mounted on a horse. He wears a ridge-crest helmet, is armed with a spear, and carries a shield, certainly suspended by a telamon, which appears to consist of a bulging targe with a flat extension of the lower edge, conceivably a leather flap or apron. We



FIG. 10

shall find a basin-like shield in the Near East at a somewhat later date, but there does not appear to be any parallel for its appendage. If the proposed interpretation is correct, the aprons sometimes shown suspended from the hoplite shield in red-figured vase-paintings may be cited; but a real parallel could only be supplied by a horseman's shield. This is by far our earliest evidence for riding in Greek lands, and we may doubt if even in Crete it was customary. The mounted warrior finds a counterpart on the approximately contemporary reliefs of

Tell Halaf,¹ and the ridge-crest helmet and basin-shield likewise point to the Near East.

The mainland evidence which provides a fresh starting-point comes from the Kerameikos and was found in the excavations of 1937-8, whose results are now published in *Kerameikos IV*. In each of three cremation graves² a bronze shield-boss was found of a peculiar type (Pl. III, 2 and 3); its essential features are a round plate rising in the centre to form a cone which terminates in a flat disk and a pin which is passed through a hole in the disk and ends in a ring inside the boss. A wire or a leather thong passed through the ring would provide the means of attachment to the framework of the shield, perhaps to a wooden bar set in the plane of the shield so as to form the vertical diameter of the boss and furnish a handle. An example was already known from a proto-Geometric inhumation grave on Skyros (Pl. VII, 1), though in the cursory account which at present is all that we have³ the means of attachment is not described; the pin apparently was not found. The grave contained the remains of an iron spear-head and stamped gold disks which show a distinct Mycenaean tradition and testify to some degree of wealth and culture. That all four specimens are of foreign derivation seems certain, though they may be of local

¹ Von Oppenheim, *Tell Halaf*, p. 147, pl. xviii b.

² Nos. 24, 40, and 43. See *Ker. iv*, pp. 27 ff. and pl. 37; cf. p. 29, fig. 4.

³ *A.A.* 1939, p. 228, figs. 2 and 3.

manufacture in either or both cases; similar bosses have been found at Hallstatt¹ in both inhumation and cremation graves. Objects exactly or approximately similar have often been interpreted as cymbals and the new finds do not settle the question in every case; there can, however, be no doubt that three examples found at Moulianás² (Crete) in a LM III tomb are shield-bosses. There were two interments, both in the contracted posture; one skeleton lay on the floor with two bronze swords beside it, the other in a small terra-cotta larnax which also contained the three bosses. None had a disk, and no trace was found of a pin; each, however, had a hole in the top and rivet-holes in the flat part. As there cannot have been room for the shields in the larnax, the bosses must have been detached before they were placed in it and the pins may then have been discarded. The hole in the top proves nothing, since the cymbal necessarily had one to admit the passage of the loop which was slipped over the wrist of the performer; the rivet-holes, however, settle the question, for they are alien to the cymbal and indicate a natural means of attaching the boss to the shield. The bosses of the Kerameikos were placed, inverted, in the mouths of the accompanying amphorae; they were therefore also detached, and here too this may explain the absence of pins. It is a curious fact that though weapons are associated with certain of the cremation deposits in the Kerameikos, none was found with the bosses; the total number in each category, however, is very small and the circumstance may be accidental.

That the form persisted in Greece is shown by the occurrence of two examples in Geometric contexts, one of bronze at Kavousi in Crete and a unique iron specimen from the Kynosarges cemetery at Athens.³ In this period shield bosses of other types were current in the Near East and were finding their way into certain Greek lands; it will be convenient to defer discussion of them for the moment. Two points of importance, however, arise at once. The use of the shield boss makes it virtually certain that the shield to which it was attached was round, which we have seen to be the normal shape in the second phase of LH III; its survival into the proto-Geometric period is now established. Whether or no it vanished for a time, if not from Greece, at least, as the evidence of the earliest prothesis vases suggests, from Attica, leaving only the hour-glass or Dipylon shield, must remain an open question. The Kerameikos bosses strongly suggest that it persisted, but only the hour-glass shield is carried by the warriors who drive their chariots in the funeral procession on the

¹ Von Sacken, *Das Grabfeld von Hallstatt*, pp. 44-5, pl. viii, 9 and 10; 11 and 12 represent varieties of the same article. They were sometimes found in groups of three or four, lying one within another, which shows that they were not attached to shields when put in the graves. Outside Greece objects essentially similar were found by S. Casson at Chanchitra in Macedonia, some 60 kilometres north of Salonica (*BSA*, xxvi, pp. 12-13 and 22; pl. i and fig. 4, p. 12). They date to the seventh century, but are of bronze.

² *Eph. Arch.*, 1904, p. 45, fig. 11; Hall, *The Civilization of Greece in the Bronze Age*, p. 256, fig. 332.

³ *BSA*, xii, pp. 91-2, fig. 12. The Kavousi specimen was given by Evans to the Herakleion museum, but could not be found there in 1938; it probably disappeared in the earthquake of 1926.

prothesis vases (Fig. 11).¹ As, however, this is true of all the examples of the scene, early and late, the preference may be due to a certain religious sanctity which appears, as will be shown below, to have attached to it



FIG. 11

and of which the round shield shows no trace. Secondly, *ομφαλόεσσα* as an epithet of the shield may have made its way into the vocabulary of heroic poetry at a date much earlier than we have hitherto had any grounds to suppose possible.

Returning to the Dipylon shield, we find that it continues to figure on later Geometric vases in scenes of battle on land and sea (Figs. 12 and 13)² in conjunction with the round and the much rarer rectangular form and even on some on which Oriental *motifs* are already prominent;³ only on a few of the late examples like the Benaki amphora is the round shield shown in sole possession. A few examples of the hour-glass appear in heroic scenes on proto-Corinthian aryballoi but none on Attic ware of the seventh century; it had probably become obsolete rather earlier than 700. In the sixth century it appears as the attribute of heroes, especially Aias, on black-figure vases, a deliberate piece of romantic archaizing.

A small clay model of an hour-glass shield in the British Museum

¹ P. et C. vii, p. 159, fig. 42.

² Pottier, *Cat. Louvre*, A 519; P. et C. vii, p. 182, fig. 67; *Arch. Zeit.*, 1885, pl. viii, 1; P. et C. vii, p. 179, fig. 63.

³ *AM.* xviii (1893), p. 113, fig. 10; *KiB.* 112, 9.

(Pl. VII, 2, 3, 4), the only detached plastic example known to me,¹ gives some notion of the structure; fortunately it is a careful piece of work, and the modelling is supplemented by useful painted detail. The shape, strongly



FIG. 12

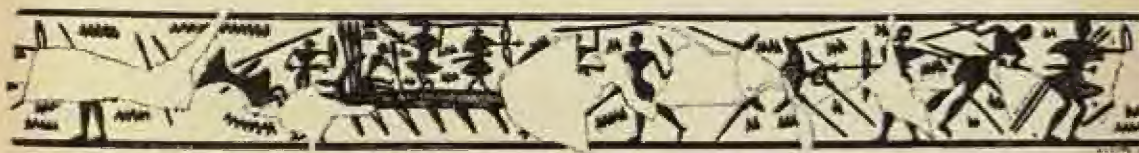


FIG. 13

convex, was apparently produced in the real shield by stretching a hide over bent and crossed staves and cutting out a scallop at each side, where the leather would otherwise have formed a fold. On the outside the rim is represented as continuous, though greatly diminished in width round the scallops, which on many black-figured vases and Boeotian coins are given a separate rim narrower than the main one; on the inside it breaks off. A vertical stave is represented in paint on the outside, and on the inside

¹ The provenance is unknown; the appearance of the clay rather suggests Argos as the place of origin.

a pair, or possibly two pairs, of crossed staves which would preserve the shape laterally and would be appropriately described by the term *καρόνες*.¹ It is true that the cross-hatching on the outside, occasionally found also in vase-painting, is more suggestive of wicker-work (which, like leather, would require a strong rim) than of leather, but it is hard to say how much significance such decoration has in an art so highly stylized, and there is no reason for scallops in wicker-work. Lippold (*Münchener archäologische Studien*, pp. 412 ff.) gives reasons for thinking that the scale pattern with which black-figure artists often cover the inside of the Boeotian shield is a conventional representation of hide with the hair left on. On the other hand, the survival of *ἱέρα* in the sense of shield in Euripides (*Cycl.* 7, *Herakl.* 376, *Suppl.* 695, *Troad.* 1193) and in a fragment (65) of obvious parody from Aristophanes shows that shields of osier were once common in Attica. In the Geometric age, except for a brief period at the end, the Dipylon shield appears, as we have just seen, to be the chief form current; and though it can hardly have originated in wicker-work (which would dispose of any claim to connexion with the Minoan body-shield), wicker-work might sometimes be adapted to a form like that of the British Museum model, the waist of which is not too attenuated. The word does not occur in Sophocles nor in Aeschylus, who might before 480 have seen originals hanging in Athenian temples. Euripides calls the *ἱέρα* 'κατάχαλκος' in the *Heraklidae* and 'χυλκόνειρος' in the *Troades*, indicating a facing of bronze; this is such an improbable combination with wicker-work as to suggest that *ἱέρα* had ceased to convey any suggestion of material. In the latter passage the shield is Hector's, and Hecuba suggests that the murdered child Astyanax shall be buried in it. For this purpose the Dipylon would be more appropriate than the circular shape, and though it had disappeared from vase-painting, the form would be familiar on Boeotian coins. The form of our model is that which we find on the federal coins of Boeotia² (whence the current name Boeotian) and also on black-figured vases, mainly Attic, of the second half of the sixth century. It is fairly well rendered on some Dipylon vases, though on others the representations, losing all touch with reality, depict a vertical bar with fantastically wide cross-pieces at top and bottom. Its size varies on these vases; commonly it reaches from neck to mid-thigh, occasionally to the knee or just below it.³ From Kardhitzia in Thessaly comes an almost barbaric bronze figurine,⁴ probably of the early seventh century, representing a warrior with a shield

¹ See note on *καρόνες* at the end of the section.

² Ultimately also on the bronze coins which Salamis was permitted to strike from 350 till 318 B.C., by which time its association with *Ahas* had of course long been established.

³ Cf. Lippold, *op. cit.*, p. 451, figs. 21 and 22; *AM.* xxviii (1903), pl. 3; *MuZ.* iii, fig. 14.

⁴ Lamb, *Greek and Roman Bronzes*, pl. xvii B, p. 43; Neugebauer, *Antike griechische Bronze-figuren*, fig. 12, pp. 27-8. The longitudinal ribbing with which the shield is decorated definitely suggests wicker-work, though the shape is inappropriate. Zervos's reconstruction of the figure with the shield held in front of it seems to lack authority; neither W. Lamb nor Neugebauer indicates any suspicion of the genuineness of the *telamon*.

whose wide scallops are more reminiscent of the vase-paintings than of our model; it covers his back, suspended by a telamon from the right shoulder. The position of the hand-grip is concealed. None is indicated on the clay model, but this has little significance; like many such votives, our specimen is pierced for suspension and would hang face outwards. As we shall find, very many clay models of the round shield lack handles.

We cannot expect to learn much about the method of handling the shield from the silhouette style of the Dipylon vases, but from the fact that both hands of the owner are constantly shown free, it is plain that it had a telamon. If we may judge from a single example on a Boeotian relief pithos,¹ it had, as we should expect, a central hand-grip as well, in this instance placed vertically. This pithos is dated by Hampe to the middle of the seventh century.²

As the Dipylon shield has been taken, especially by Lippold, to represent the body-shield of Homer (in the sense that a parallel form is assumed to have existed in Ionia at the time of the composition of the epic and to have been described in it), theories held as to its history must be briefly investigated. Its origin is obscure. Only two forms are known to which it bears any likeness, and the objections to deriving it from either are strong, though in one case at least not conclusive. The first is the figure-of-eight shield, of which the Dipylon may be a shrunk descendant. If it could be proved that the eight-shaped shield was at home on the mainland, as its presence on the Shaft-grave stele may be thought to suggest, the case for this view would be much strengthened. The resemblance of the British Museum miniature Dipylon to small models of the Minoan form is marked,³ and though the disappearance of the latter from the Argolid (for which alone we have evidence) in LH III makes continuity in that region doubtful, there are indications, scanty but reliable, that in Arcadia, where survivals are most probable and alien infiltrations least likely, a shield almost identical with the Dipylon was in use in the Geometric age. On the site of the temple of Athena at Tegea, which yielded a good deal of Geometric material, several miniature shields were found, cut out of sheet-bronze and approximately of Dipylon type.⁴ They differ markedly, however, from the type of the Attic

¹ *BCH.* xxii, p. 499, fig. 13; R. Hampe, *Frühe griechische Sagenbilder*, pl. 39 (upper half). In Hampe's illustration, reproduced from a photograph, it is hardly possible to identify with certainty the shape of the shield, as the surface of the pithos is badly damaged at this point; the illustration in *BCH.*, a woodcut from a drawing, makes it clear. Hampe interprets the subject as an episode from the *Cypria*, the raid of Achilles on the cattle of Aineias. If this is correct, the form of the shield is more probably a trait of heroic convention than of contemporary Boeotian armature.

² *Op. cit.*, p. 58. Hampe's absolute chronology is criticized in *BSA*, xxxv by J. Cook, who dates this pithos to the second half of the seventh century (p. 208). As the scene on the pithos is probably heroic and therefore archaizing, the difference in date is not important to the question here at issue. In either case, a true tradition of the handling of the shield has evidently been preserved.

³ *Schachtler*, *Textb.*, p. 107, fig. 35 (small model attached to Siege vase) and *JHS.* xiii, p. 22, figs. 5, 6, and 8.

⁴ *BCH.* xlv (1921), p. 322, fig. 19.

vases in being much narrower at top and bottom and less reduced at the waist; in fact, they represent a quite practical type. As they are quite flat, no comparison of curvature with the British Museum model is possible. That they are local is virtually certain; the sanctuary, important though it was and situated on a main road, had no pan-Hellenic significance and would have few visitors from beyond the Isthmus. Evidence for the existence of the Dipylon shield elsewhere in the Peloponnese is scanty, but Geometric figure-painting in that region is rare.¹ It is unfortunate that apart from the proto-Geometric shield-bosses there is no evidence earlier than that of the Dipylon vases for the history of the shield in Attica, and for Boeotia only that of the Ashmolean gold ring, which is irrelevant here (apart from the uncertainties attaching to it) since only the tower-shield is represented on it. There is, however, a serious structural difference between the Minoan and the Dipylon forms; the typical eight-shaped shield is drawn in at the waist, not scalloped, and the border is not cut,² as it is on Dipylon vases (where in fact if it is represented, it is confined to top and bottom) and on Boeotian coins. Nor has the Dipylon shield any of the characteristics of a body-shield. Even Lippold's seventh-century example (*v. infra*, p. 165), though on a heroic scale, is far smaller than the Bronze Age representations of the eight-shaped shield. The Kardhitzia figurine shows that it was suspended from the right shoulder, which makes it certain that it was manipulated by a hand-grip; only when the shield was large enough for the rim to rest on the ground while the owner thrust with his spear was it possible to suspend the telamon from the left. Further, the evidence of the bronze is corroborated by that of the Boeotian pithos sherd, which does not exhibit the black-figure artists' error of giving the shield an arm-band and therefore has some claim to be regarded as giving a true portrait, even if the subject of it was obsolete. A few appearances of the Dipylon shield

¹ The only other examples from the Peloponnese known at present occur on: (1) a sherd from the Argolid, probably from Mycenae, on which part of a line of marching warriors is depicted (*Jb.* xiv, p. 85, fig. 44). Their shields conform to the Attic type; an extra touch of unreality is added by the detached and quite irrational dot inserted in each scallop. This dot is found in connexion with a symbolic shield on a proto-Attic vase and on a piece of stamped gold leaf from Eleusis (*Jb.* ii, p. 54; *HW.*³, p. 7, figs. 13 and 15). The style of the sherd is not Attic, but suggests use of an Attic model. (2) A few sherds from the Argive Heraion (*Arg. Her.* ii, p. 112), apparently from a single vase, on which a line of warriors is represented. The sherds have not been reproduced, but are probably local; Attic Geometric has not so far been identified at the Heraion. See T. Dunbabin, *BSA.* xxxvii, p. 84. (3) Incorrectly handled as a hoplite shield on three proto-Corinthian vases (Johansen, *VS.*, pls. xxxiii, 1 f. and xxxiv, 2, and a third found at Pemchora and published *BSA.* xlii, p. 93, fig. 7). (4) On a fragment of a relief pithos from Sparta (de Ridder, *Vases Bib. Nat.*, no. 166; cf. *AO.*, pp. 88-92 and pl. xvi). 3 and 4 exemplify the artistic treatment of the shield as heroic after it had gone out of use. (5) A small model cut out of sheet-bronze was found at Olympia (*Ol.* iv, p. 162, pl. lxii, no. 1003), which throws no light on its place of origin. It conforms to the Dipylon vase type and has a border of simple cable-twist at top and bottom. Even the Arcadian temple at Bassai yielded only round shield votives.

² One example of a figure-of-eight shield with interrupted border has been adduced; it occurs on a disk of grey stone from a chamber-tomb at Mycenae (*JHS.* xlii, p. 217, fig. 27). It is, however, merely a motif in a design, not a shield in use.

in the early archaic art of Crete may perhaps suggest a continuous development of the eight-shaped shield in what was most probably its original home. On the Hunt shield (Pl. VIII, 1),¹ the most notable of those recovered from the Idaean cave, the armed men engaged in combat with lions carry for the most part a round shield with a central boss and a multitude of smaller ones arranged concentrically, a type which will be further discussed below. Two men, however, have the Boeotian or Dipylon shield, assimilated to the round form, not indeed by a central boss, which is alien to the type, but by rows of small ones, yet equipped with the continuous border which we have seen to be characteristic of the eight-shaped shield.² The bosses thus distributed over the whole surface are non-Minoan, but they may be there for merely stylistic reasons; so large a space left plain would not accord with the close texture of the decoration. We may compare, however, the well-known Geometric sherd in the Louvre (Fig. 14)³ on which the three forms of the Geometric shield—round, rectangular, and Dipylon—figure side by side; the last is covered with light spots which suggest metal bosses strengthening or decorating a leather shield. On the Hunt shield the bosses are arranged in horizontal lines across the waist of the shields in question; on some Geometric vases from the mainland⁴ horizontal lines in paint are drawn across the waist of a similar shield. On a Geometric sherd from Vrokastro⁵ two warriors in a chariot are represented with Dipylon shields. Unlike the realistic shapes of the Hunt shield, these are stylized in the extreme Attic manner, the waist being reduced to a mere line; the helmet, too, is of a form common on Dipylon ware. The mottling of the shield, apparently to indicate bull's-hide in the old Minoan manner, is a Cretan feature, also found on two symbolic representations on sherds from the same site,⁶ decorated in an earlier style in which Minoan tradition survives; on the whole, however, the suggestion of mainland influence is strong. On the other hand, the occurrence of the Dipylon hour-glass shield on a fragmentary Geometric skyphos



FIG. 14

¹ *KBR.*, pls. 10-20 and Beil. 1.

² One of the horsemen in the outer zone also carries a minute Dipylon shield.

³ *AM.* xvii (1892), p. 215, fig. 4. A large sherd with the same combination of shields, probably from the same vase, is in the national Museum at Athens.

⁴ See, e.g., Watzinger, *Gr. Vasen in Tübingen*, pl. i, B 10.

⁵ *Vrokastro*, p. 58, fig. 53 c.

⁶ *Op. cit.*, p. 94, fig. 50 b and c. They are spotted all over, and may be compared with examples on LM 1 b sherds from Gezer and Phylakopi (*P. of M.* iii, p. 312, figs. 200 and 201). The larger has the uninterrupted border characteristic of the figure-of-eight shield, though, as it happens, lacking on the sherd from Phylakopi.

from the Heraion of Samos¹ points to a wide diffusion of the form in the eighth century. The skyphos is undoubtedly of local manufacture, and the subject—a prothesis—must reflect local usage. The shield has no distinctive peculiarities.

Between 350 and 280 B.C. the Boeotian shield is also found on certain coins of Polyrrhénion,² an important city of west Crete; the most probable explanation, however, is that it commemorates an alliance with Thebes, and therefore affords no evidence of the survival, even as a symbol, of the Minoan shield in Crete.

None the less, the possibility of the post-Mycenaean use of the eight-shaped shield in Crete cannot be wholly excluded. It may have lingered under Achaian domination, even as targe and claymore survived to figure at Culloden, and played its part in the unrecorded warfare which ended apparently in the defeat of the natives and their withdrawal to those impregnable and almost inaccessible sites which are characteristic of the proto-Geometric age in the island. It may have even been carried to Ionia by the Cretans who shared in the founding of so many Ionian cities; and thus, possibly, it may have found its way into epic.

Cyprus, the scene of extensive Mycenaean colonization in the fourteenth century, might be expected to furnish evidence if the body-shield were still in use in the homeland at that date. Apart from the negative testimony of the ivory mirror-handle already cited, there is no monumental evidence for the Mycenaean age.³ If the body-shield were in use, we should expect it to survive, like other archaisms, in the succeeding period; but the evidence of the Early Iron Age is adverse. It is true that we have a unique terra-cotta (Pl. VIII, 2)⁴ which represents a warrior with the cylindrical body and peaked helmet characteristic of the period, but holding before him an 'hour-glass' shield whose position shows that it was wielded, as one would expect, by a central hand-grip. If the form could be shown to have been in use in Cyprus at that date, survival from the Bronze Age and derivation from the eight-shaped Minoan shield would have to be considered as serious possibilities, but the evidence of a single example, especially in view of the almost countless representations of various forms of the round shield, is insufficient to establish even a *prima facie* case. It is certain that relations between Cyprus and mainland Greece, especially Attica, existed in the Geometric age; and the pieces of Dipylon and other Greek Geometric ware of Cypriot provenance noted above show that

¹ *AM.* liv (1929), p. 15, pl. li.

² Head, *Hist. Num.*,² p. 474; Svoronos, *Num. de la Crète*, pl. xxv. 33.

³ The object carried by a male figure on two Mycenaean vases from Enkomi (*Cat. VBM.* i. ii, p. 66, fig. 112 a; Nilsson, *Hom. and Mycenae*, p. 268, fig. 56) is by some regarded as a sort of 'Dipylon' shield, but the identification is more than doubtful. The necklace from Enkomi formed of a double row of Minoan shields (*Exc. in Cyp.*, pl. vi) has of course no value beyond showing the diffusion of the emblem to a Mycenaean colony.

⁴ In the Cestriola Collection in New York. From a photograph kindly supplied by the Metropolitan Museum of Art.

Greek articles could find their way to Cyprus.¹ Some Cypriots may have visited Athens and observed the local armature; more probably perhaps Greek soldiers of fortune would now and again drift to Cyprus and furnish a subject for local koroplasts. Nor should it be forgotten that the hour-glass shield occurs on Cretan Geometric ware. The intermittent activities of Assyria on the Syrian and Phoenician coast might well lead to the employment by her enemies of any mercenaries available until Sargon established a supremacy which included even Cyprus, while the Greek settlement at Al Mina on the Syrian coast² and the military activity of Greeks in Cilicia in the year 698³ prove that they were no strangers in these regions. With so many possibilities of external influence, it is improbable that this unique monument represents a Cypriot type.

The second shield which has some resemblance to the figure-of-eight is the considerably smaller form with incurving sides and a central hand-grip used by the Hittites and their friends at the battle of Kadesh (Fig. 15).⁴ Here the resemblance is less strong; the Hittite shield has a much slighter curvature and lacks the border which is a conspicuous feature of the Dipylon shield. If there is a connexion between the two forms, it would seem that it must go back to the Bronze Age; i.e. the inhabitants of Greece must in that period have borrowed, directly or indirectly, from the Hittites a shield which in the course of time developed into the Dipylon shield. There is nothing unreasonable in the supposition, for we have noted on the Warrior vase indications of Near Eastern influence. The borrowing cannot well be put later, for in the Dark Age Greece was cut off from the outside world to a degree not paralleled in any other period of her history; and as soon as monumental evidence re-emerges in the Near East, Syro-Hittite⁵

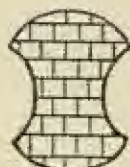


FIG. 15

¹ The principal pieces at present known are: in New York, Cesnola's amphora (Dipylon) (*Handb. Ces. Coll.*, no. 1701), its once doubtful provenance now corroborated by other finds; an oinochoe, perhaps Argive, *op. cit.*, no. 1702; three Dipylon bowls, *op. cit.*, nos. 1703-5; in the British Museum, a fragment of a large vase from Amathus (*Exc. in Cyp.*, p. 103, fig. 150). Unpublished, a black-glaze Dipylon bowl and a fragment of another from Larnaka. In the Cyprus Museum, Nicosia, a Geometric krater, perhaps Argive, found by the Swedes at Amathus (*SCS.* ii, pp. 59 ff.).

² *JHS.* lviii (1938), p. 7.

³ *Ibid.* xxx (1910), pp. 327 ff.

⁴ Rosellini, i. 103, *HE.*, pp. 132, 133, figs. 25, 26; for the shield by itself, *P. of M.* ii, p. 52, fig. 25 f. On the same relief a rectangular shield is carried by an ally of the Hittites; an all but rectangular example approximating to this type is held by a bronze figure of the god Teshub-Reshet which was found at Megiddo and belongs to the Palestinian period Late Bronze II. In the Near East it remained in use among the Assyrians and some of their enemies (Layard, *Mon. of Nineveh*, i, pls. 17 and 68) and may possibly have been the model of the rectangular shield sometimes found on Attic Geometric and proto-Attic vases.

⁵ On a relief from Sinjerli (*Ausgrabungen von Sendscherli*, iii, p. 213, pl. x1; Contenau, *Manuel*, ii, p. 286, fig. 680) we have a divine being holding a very small shield which in outline resembles a dumb-bell with straight-sided centre-piece and rounded ends; it remotely suggests the eight-shaped shield and like it has a border, but is quite small and is wielded by a

and Assyrian works of art offer a considerable variety of shields drawn from a very wide area without a single example of the Hittite.¹ We must assume then on our present hypothesis that Attica, Boeotia, and perhaps Thessaly took over the ancestor of the Dipylon shield at about the time when the Peloponnese was introducing the round, also from the east, but presumably from a different region.²

Lippold's own hypothesis that the Dipylon shield was introduced into Greece from the north early enough to be carried to Ionia by the first Greek colonists sprang in part at least from his desire to identify it with the body-shield of Homer, but also recognized the objections to affiliating it to the Minoan eight-shaped shield, and has since received confirmation, so far as its appearance in Ionia is concerned, from the Samian Geometric sherd referred to above (pp. 161-2). Its entry into Greece must on this assumption go back to a remote past and would most plausibly be associated with that of the women's pinned dress to which the sub-Mycenaean graves of the Kerameikos bear witness. We should in that case have two innovations appearing simultaneously with the Dorians, but adopted, it would seem, generally in Greece, at any rate in regions where the newcomers never gained a foothold. Yet it is difficult to associate the change with anything but some closer contact with Dorian communities farther north, and the fact that the dress was later regarded as Doric may indicate that it was in fact originally theirs. This may also be true of the shield. As regards the Dipylon shield in Ionia, we have so far only the evidence of the Samian sherd, and from the same site a series of miniature terra-cotta votives³ which are all of them circular are also partly of Late Geometric date, and testify to the appearance of Oriental influence at much the same date as on the mainland. The few Ionian black-figured vases on which the 'Boeotian' shield appears as a heroic attribute were probably inspired by Attic art.

The Kardhitza bronze accords with a northern origin, and the numerous indications that the Dipylon shield was wielded by a hand-grip dissociate it from the Minoan shield.

As regards its claim to be the original of the great shield in Homer, it must be noted that there is no contemporary representation of it which can be described, even doubtfully, as that of a body-shield, and no single

hand-grip. It is impossible to guess at the origin of this form, all the more so as the relief cannot be dated, and in any case the equipment of a deity affords no reliable evidence of contemporary human usage.

¹ The series of relevant Assyrian monuments begins with the reliefs of Assur-nasir-pal (884-859). Syro-Hittite monuments cannot at present be dated precisely; they also, however, begin in the Early Iron Age.

² Evans's view (*P. of M.* ii, p. 53) that the Hittite shield was taken over by the Greeks of the Geometric age does not take account of these difficulties. The Dipylon shield first appears on Attic vases in purely Geometric schemes of decoration, whereas the appearance of the round shield is accompanied by that of other Oriental features.

³ *AM.* lviii (1933), pp. 118 ff., Beil. xxxvi-xxxvii.

one of a Geometric shield which could have caused the mishap described in *O* 645-6.

Lippold the originator and Nierhaus the most recent adherent of this identification alike rely for evidence on a single Boeotian jug¹ (Pl. VI, 2) on which a Boeotian shield is represented as reaching half-way down the shin of the owner. Not only is this example unique; the painting as a whole bears marks of lateness and cannot be earlier than the seventh century. It is true that we cannot apply the test of the *πόρπαξ*, for the shield is shown full-face, obviously suspended by a telamon, since both hands of the owner are visible. Its structure, however, is misrepresented, for the rim has become detached from the sides both above and below and developed into something like two pairs of horns for which there is no parallel in Geometric art. Moreover, the warrior wears a Corinthian helmet, which occurs on no other Geometric monument and is from its first appearance associated with the *πόρπαξ* shield. Only single spears are in use on this vase, which is another unique feature, and they are remarkably large and heavy. Moreover, the owner of the 'body-shield' and another combatant swing theirs in both hands, again an action not elsewhere depicted in Geometric art, and a physical impossibility if a shield of the width represented were really hanging in front of the man by a telamon. When Aias, defending the ships with a 22-cubit spear, adopts this method—*νόμα δὲ ξυστόν μέγα ναύμαχον ἐν παλάμῃσι*²—his shield was probably laid aside, possibly slung behind him. No doubt it was some such heroic scene that the artist of the Munich vase intended to render, and the obsolete shield indicates his intention. The Boeotian fibulae of the seventh century are similarly dominated by Geometric tradition and present similar inconsistencies in equipment, though the Boeotian shield has all but disappeared. A solitary instance shows it carried by a warrior who stands erect on a horse's back, holding a single large spear.³

The form of the Dipylon shield is simple, produced apparently by taking a hide cut to an oblong shape and stiffening it by a vertical stave down the middle and a horizontal one at top and bottom. The leather would shrink where it was not kept taut, viz. vertically down the edges, pulling the top and bottom staves into their characteristic arch, and also laterally, forming the waist which Attic artists generally exaggerate. There is no cause for surprise if the Hittites had developed a similar type some centuries earlier. It may be that the rectangular shield which occurs on Attic Geometric and even proto-Attic ware⁴ was produced by adding side-staves to prevent shrinkage.

¹ *Münchener Archäologische Studien*, p. 451, figs. 21 and 22; *Jb. liti* (1938), p. 96, fig. 2. The following passage is repeated from 'The Hoplite Phalanx', *BSA*, xlii, p. 124, where the vase is discussed with reference to the date of the disuse of the Dipylon shield.

² *O* 677. Cf. one of the hunters on the Lion-hunt dagger-blade.

³ Hampe, p. 12, fig. 1.

⁴ On a sherd from the Athenian Agora, *Hesperia*, Supp. ii, p. 136, fig. 39. It is possible that

Shorn of its exaggerations and with a revised chronology, Reichel's hypothesis best fits the facts. Homer's body-shield perpetuates the memory of those current in LH I and II and probably still remembered in the early part of LH III. Improbable as this appears at first sight, it is not an isolated phenomenon; we are driven back to a similar hypothesis when we seek to account not only for the boar's-tusk helmet, but for the whole Bronze Age setting of the poems. The poet's knowledge cannot be accounted for by assuming the survival through so many disturbed centuries of objects made of perishable material; it can only have come to him by poetic transmission.

That Greek audiences of the eighth century and earlier on both sides of the Aegean visualized as the Dipylon shield the body-shield which must have figured in the heroic poetry of their day is highly probable; though its length is little if at all greater than the diameter of the hoplite shield, it greatly exceeds that of many contemporary round shields. It certainly had (and the fact is indicative of its great antiquity) religious associations;¹ for on Late Geometric pottery it is found as an isolated *motif* which must have had some such symbolical value as belonged to the eight-shaped shield of the Bronze Age, and near the end of the period it occurs as the blazon of a round shield on an amphora in the Benaki collection at Athens and also on the Hymettus amphora in Berlin.² It was natural that after it had dropped out of use it should become the attribute of the warriors of the heroic age. Its form was remembered; doubtless here and there not merely miniature models but actual Dipylon shields could be seen in temples. In later days there is ample testimony to such dedications; and unless the artists had models before them, it is difficult to account for the re-emergence of this obsolete type as the 'Boeotian' shield of black-figure vase-painting. Significantly, its true structure has been forgotten. Not only does it occasionally acquire an incongruous blazon; it is regularly equipped with the alien and anachronistic *τόπιον* (*v. infra*) of the hoplite shield which, with the hand-grip, is placed on the long axis and at right angles to it, so that the arm when at rest would be in a vertical position and the shield when in use would project horizontally on both sides and furnish, as can be seen in a number of vase-paintings, the minimum of

this shield survived in the oblong type which lingered among the Achaeans of the Corinthian Gulf till the days of Philopoemen (Paus. viii. 50. 1).

¹ The evidence for this comes almost exclusively from Attica, but the occurrence of the form as part of a trinket, perhaps of a necklace, at Lindos (*Lindos*, i, p. 109, pl. 11, no. 240) may indicate sanctity in this region also. The mysterious but surely ritual scene in which it figures between two spinning women on a Geometric sherd in the British Museum and on a jug from the Kynosarges cemetery (*BSA*, xii, p. 32, fig. 2 b; one figure missing) may be noted, as well as a gold leaf strip from Eleusis (*Epik. Arch.*, 1885, pl. 9. 3). The Dipylon shield alternating with tripods on the neck of a jug may indicate that the shield was a normal item among the grave-goods of a man of military age; cf. the helmet on a Geometric pyxis from the Argive Heraion (*BSA*, xxxv, p. 104, no. 7, figs. 11 b and 12; p. 105, no. 13, pl. 26. 2).

² *BSA*, xlii, pl. xix; *fb*, ii (1887), p. 43, pl. v.

protection. This lack of verisimilitude is not surprising, for only the outer face of a shield suspended as a votive would be open to inspection. That Athenian artists lost their models for good in 480 may be one of the reasons for the almost total disappearance of the shape from subsequent vase-painting. Examples in Corinthian art are few and appear to be imitations of Attic work.¹

Most of our post-Geometric representations are to be found in black-figure vase-painting, principally Attic, in which the Dipylon, generally called in this connexion the Boeotian, shield figures chiefly in episodes from the Cycle and is associated primarily with Aias and after him with Achilles. Its profile is often shown and agrees with that of the British Museum model. It is possible that it survived in Boeotia in some ceremonial use, for as late as the fifth century we find it forming part of a terra-cotta group from Tanagra.² The subject is a chariot occupied by charioteer and warrior; the former has a well-executed Boeotian shield slung over his back, the latter carries the normal hoplite shield on his left arm.

It remains to determine if possible the character of the round shield which on vases of the later Geometric age begins to supplant the Dipylon form. Whether or no the type, in one variety or another, came down in unbroken descent from the Late Bronze Age, its re-emergence as the leading form was certainly due to the revival of those Oriental relations which, virtually severed even before the final collapse of LH III civilization, begin to manifest themselves once more in the eighth century. Reichel accepted the assumption of his own day that the only round shield known to the Greeks was the hoplite or, as he calls it, the Ionian shield, of which the essential features are a central arm-band (*πόρπαξ*) through which the soldier's arm was thrust up to the elbow and a loop (*ἀντιλαβή*) fixed just within the rim of the shield which he grasped with his hand.³ As the shield had no *telamon*, the bearer's left arm was immobilized for combatant purposes and could not be used after the manner of the Geometric warrior's, whether he carried the round or the Dipylon shield. Heibig, doubtless influenced by the fact that once the Shardana shield of the Abu Simbel relief had been cleared of its modern accretions no example of the hoplite type is known in the Near East, put forward, on

¹ Payne, *Necrocorinthia*, p. 116. On a proto-Corinthian aryballos in the Louvre on which Paris is depicted shooting an arrow at Achilles, in another group to the left a warrior with a Dipylon shield is engaged in single combat over a man collapsing in death. He probably represents Aias attempting to rescue the corpse. *BSA*, xlii, p. 100, fig. 9 d. The single Spartan example on a sixth-century relief pithos noted above (p. 160, n. 1) is doubtless copied, directly or indirectly, from the same source. Typical black-figure examples are: Chalcidian, first half of the sixth century, Aias seeking to rescue the body of Achilles (*Mon. d. I.* i, 51; *MuZ.* iii, 229); Attic, Nearechos (frag.), Thetis or Nereid with shield of Achilles (Graf, *Vasen d. Akrop.*, pl. 36; *MuZ.* iii, 237); Exekias, Aias and Achilles playing draughts (*Gr. Fm.*, pl. 131; *MaZ.* iii, 129); School of Exekias, Suicide of Aias (de Lasteyrie, *Album des Musées de Provence*, pl. 14; *MuZ.* iii, 234).

² *Éph. Arch.*, 1886, pl. 3. A similar group in the Louvre, poorly reproduced *BCH.* xxiv, p. 317, fig. 3, looks like a work of Geometric art.

³ For a fuller discussion of the hoplite shield see *BSA*, xlii, pp. 75-7.

quite inadequate evidence, the undoubtedly correct opinion that we have to do not with the hoplite shield with arm-band and hand-grip, but with one which had a single, generally central hand-grip such as was in contemporary use in Assyria. For proof he relied principally on a series of miniature terra-cotta shields, twenty-two in number, from the dromos of the LH III tholos tomb at Menidhi¹ (Acharnai), relics of a cult maintained there from Geometric days till about 500 B.C. They are all round and all have central loops on the inside; but they also have a slip of white paint, which alone suffices to date them as not earlier than the second quarter of the seventh century. As the shields of the Hymettus amphora show, the hoplite type was already established in Attica; the central loops are therefore for suspension only, or else the modeller did not trouble to add the marginal hand-grip. Similar shields were already known from other places in Attica and Boeotia, and other groups have been found since in the Agora at Athens,² at Corinth,³ and in Samos⁴ on the site of the Heraion. Of these the most interesting is the group from the Agora.⁵ It formed part of a deposit in which the earliest elements belonged to the last quarter of the eighth century and the latest to a date c. 640, and within it the change from single hand-grip to arm-band and marginal hand-grip—i.e. to the hoplite shield of classical Greece—is recorded.⁶ Of thirteen specimens sufficiently well preserved to admit of reconstruction nine were of hoplite type with *πόρπαξ* and *ἀντιλαβή*, and only four had a single handle or loop. This proportion would of itself suggest a date little later than 700 for the disappearance of the single-grip shield, an inference confirmed by the appearance of the hoplite shield on a proto-Corinthian aryballos from Perachora dated to c. 680 B.C. and on the contemporary Hymettus amphora. Nor is it probable that all the examples with a single loop from the Agora represent single-grip shields. One of the four is the only example in the whole series of thirteen which has a blazon (horse and rider) and is therefore unlikely to be earlier than the hoplite specimens, which have only geometric patterns. Moreover, three of the four have the white slip and coloured decoration which marks them as not earlier than c. 675. The fourth,⁷ however, has no slip and is decorated in Geometric glaze-paint with three concentric circles and a large central spot which plainly represents an omphalos (Pl. VI, 3). As a piece of the circumference is missing,

¹ *Jb.* xiv (1899), pp. 108, 111, and 118; Helbig, *Österr. Jahresb.* xii (1909), p. 45, fig. 33.

² Dorothy Burr, *Hesperia*, ii (1933), pp. 609 ff.

³ *A.J.A.* xxxv (1931), p. 27.

⁴ *A.M.* lviii (1933), pp. 118 ff., Beil. xxxvi and xxxvii.

⁵ The remarkable colouring characteristic of most of the group—a coat of white paint on which decorative motives, sometimes concentric circles, are painted in red, black, bluish-green, and yellow—probably points to Cypriot influence, which may account for the survival of the concentric circle ornament, v. *infra*, p. 177. Similar Cypriot votives are commonly painted white with decoration in red and black; one example is cited with circles of blue or green paint (*JHS.* xvii, p. 137).

⁶ Burr, *op. cit.*, pp. 635-6.

⁷ *Ibid.*, p. 612, no. 288, fig. 80.

it is impossible to prove directly that there was no marginal ἀντιλαβή; the decoration, however, makes it certain that there was not, for concentric circles with central spot never occur among the blazons of the hoplite shield, even the earliest, of which proto-Corinthian and proto-Attic vase-painting furnish abundant examples. Moreover, it lacks the off-set rim characteristic of the hoplite shield.

Nothing further can be learned from the Corinthian group, of which none has more than one loop and some have none at all; none is Geometric and most employ red paint and are of relatively late appearance. It is safe to assume that all represent the hoplite type.

The terra-cotta votives from Samos were found in deposits which, though not strictly speaking stratified, were exclusively or predominantly of Geometric or sub-Geometric date;¹ they are all circular and of pre-hoplite type, and are ultimately derived from a form (the 'Lambda' shield) which appears to be indigenous in Cyprus. An actual specimen of bronze was found at Idalion² and is now supplemented by a fragmentary example from Delphi.³ The origin of the form in a circular leather shield has been convincingly explained by Sir John Myres, who kindly permits me to quote his account. To give the flat circular form a peak calculated to deflect weapons a radial line was cut and the edges of the incision drawn one over the other and in this position stitched down; the lines of stitching would form a lambda. Neither the Idalion shield nor any one of the small models which have come to light reproduces this simple primary form; there is always a number of concentric circles, each interrupted by a lambda, the innermost of which impinges on a reserved circular space which generally has the form of a flattish cylindrical omphalos. On the original leather shield the concentric circles would appear if it were formed of several diminishing layers of hide and the radial line were cut through all alike; but, single or multiple, hides so treated would necessarily produce when stitched together a strongly peaked shape. When the shield was translated into metal, the structural reason for the peak no longer existed, and the lambda ornament was transferred, it would seem, to a different type of shield, that namely with the low cylindrical omphalos, whose history it will be necessary to trace later on. In this form the lambda type has occurred on another Rhodian site, viz. Ialysos, where three small bronze models were found in the deposit (Geometric and archaic) from the temple.⁴

Returning to the evidence collected by Helbig, we find one more item, on an Attic Geometric vase at Copenhagen already cited.⁵ The subject depicted on it is a coast raid. One of the defending force holds out a small

¹ *J.M.*, lviii (1933), Beil. xxxvii. One example is reproduced by Kunze (*KBR.* Beil. 3 a).

² *P. et C.* iii, p. 869, fig. 636.

³ *Fouilles de Delphes*, v, p. 25, fig. 99.

⁴ *Clara Rhodos*, i (1928), pp. 72 ff., where a summary account of the excavation is given, and on pp. 76-9 a brief note on the objects found. The shields which were exhibited in the museum at Rhodes in 1938 are not mentioned.

⁵ *P.* 157, Fig. 13, *supra*.

shield at arm's length in front of him, an attitude impossible with the hoplite shield, which could be advanced only by the length of the bearer's upper arm. We have seen it already on an LH III sherd from Tiryns.¹ This is in fact Helbig's one unimpeachable piece of evidence from Greece, since the Menidhi shield models have been proved unreliable; the Sparta figurines, which he cites with great reserve, show indeed that the Laconians had known the single-grip shield at some period, but are lost in the overwhelming majority of hoplite types. A shield similarly extended occurs on a Geometric sherd from Chios,² on which an armed man is represented in combat with a lion, and yet another is so held by a minute figure which appears between two gaping lions on a Late Geometric cylix from Anavyssos in Attica;³ but neither had been found at the date when Helbig wrote his article. As all three examples are shown in profile, it is impossible to say with certainty what their shape is supposed to be, but they are too small to be 'Dipylon' and our only alternative to the round shield is the rare rectangular form found occasionally on Late Geometric and proto-Attic vases. The shield of the armed goddess on a proto-Corinthian aryballos in the Ashmolean⁴ which is held at arm's length is shown full face and is circular. An archaic bronze figure from Olympia holds a small round shield by a single hand-grip; a second, who has lost his shield, still grasps a disproportionately large central handle.⁵

The unique iron shield-boss from a Geometric tomb in Athens⁶ gives the first piece of evidence for a particular variety of round shield in Greece at this date; that other forms were also current will presently appear.

Two monuments of the greatest importance to this investigation were unfortunately still unpublished at the date of the outbreak of the war, and the description which I have given of them elsewhere is necessarily inadequate;⁷ the evidence which they afford, however, even under these conditions is definite enough to be quoted. They are two shields of terra-cotta (A and B, Pls. IX and X) found in a pit of discarded votives from the Geometric temple of Hera at Tiryns, miniature, but of exceptional size, the larger 15 or 16 inches in diameter, circular, perfectly flat, each equipped with a central hand-grip and each decorated on both sides with figure-painting. There is a strong presumption that they are products of Argive art, for

¹ Schliemann, *Tiryns*, p. 333, fig. 153.

² Kunze, *KBR.*, pl. 53 e.

³ *BSA.* xxxv, pl. 35, no. 33.

⁴ *JHS.* xxiv (1904), p. 395, fig. 303; Johansen, *FS.*, pl. xx, t. b.

⁵ *Ol.* iv, pl. xvi, nos. 242 and 243. The latter is reproduced by Kunze, *Antike u. Abendland*, II, p. 103, fig. 5.

⁶ *Supra*, p. 155.

⁷ 'The Hoplite Phalanx', *BSA.* xlii, pp. 133-8. The reproduction on pl. 18 A of the *Annual* of the outer face of A was made from a microfilm lent by the Metropolitan Museum of New York, the inner, as not relevant to the purpose of the article, was omitted. On Pls. IX and X of this volume both faces of both shields are reproduced from photographs. On the reverse of A (Pl. IX, 2) a centaur is represented hurling branches at a herd of deer and fawns: he is presumably Chiron in quest of the marrow of deer or fawns which formed part of the diet of the infant Achilles. (*Et. Mag.* s.v. Ἀχιλλεύς and Philostr. *Herac.* 730. I owe this suggestion to Mr. Dumbauld.)

the first temple of Hera at Tiryns is not likely to have attracted foreign donors, and there is very little traffic in Geometric ware even between the communities of the mainland. The style of the painting has no real parallel, for in its use of outline it goes much beyond even the latest Geometric vases, which are also surpassed in the considerable scale and the life and movement of the figures and in the attempt to render momentary attitudes. There is a certain resemblance to a later and much inferior monument, the krater of Aristonothos, generally regarded as Argive, but the source of inspiration is surely to be sought in contemporary free painting, of which it is in fact a miniature example. It is permissible to hazard the conjecture that the shield-painter's model was not very far off, possibly on the inner walls of the temple of Tiryns or of the neighbouring Argive Heraion.

On the outer face of A is depicted a battle of Greeks and Amazons with two combatants on either side. There are good grounds for interpreting the subject as the slaying of Penthesilea by Achilles. The date is appropriate; the *Aithiopsis*, in which the episode occurs, was known to the author of the *Odyssey*, and another incident from the Cycle, Paris shooting at Achilles, occurs on two proto-Corinthian aryballōi of the first and second quarters of the seventh century.¹ That Corinth was in close relations with Argos in this period is plain from the Argive house-models of Geometric date found at Perachora; it was probably through Argos that she received her knowledge of Homer and the Cycle.

In the equipment of the combatants there is nothing post-Geometric; corslet, greaves, and Corinthian helmet are absent, and the various forms of head-piece represented can all be paralleled within the limits of Geometric art. There is no reason to date the shields below 700. Both are unfortunately fragmentary, but enough of the Achilles and Penthesilea group remains to make it certain that the two secondary figures have single-grip shields which they hold out in front of them. Not more than half of each shield is preserved, but it is enough to show that both have a decidedly convex profile, differing therein from the perfectly flat model which they decorate. The Greek's is painted in silhouette, the Amazon's is cross-hatched, perhaps to indicate wicker-work and suggest an inferior civilization. The decoration of the smaller shield (B), of which even less survives, includes the figure of a warrior who holds in front of him by its central handle a shield with convex profile; he grasps two spears in the same hand and brandishes a sword with the other.

The number of monuments from the Aegaeon area on which shields can be actually seen to be of the single-grip type is thus considerably augmented, and now that it is possible to fix the appearance of the hoplite shield to a date not earlier than 700 it follows that all the shields on Geometric vases must represent the older sort, a conclusion which is supported by the representations. In scenes of battle both hands are shown in

¹ See *BSA*. xlii. p. 23, fig. 7, and p. 95; p. 100, fig. 9 d.

simultaneous action, brandishing spear and sword, while the shield retains its position covering the trunk.¹ Files of marching warriors have their arms in such positions that neither can possibly be thrust up to the elbow through a *πόρπαξ*, while in this case also the shield, obviously suspended, continues to protect the body.² Finally, the pair of throwing-spears which on Attic Geometric ware is the regular accompaniment of every shield, whether of the hour-glass, round, or rectangular form, is incompatible with the hoplite shield and tactics. The Geometric shield was of course suspended by its indispensable adjunct the *telamon*, by which it was carried alike on the march and in the field. That it does not appear in the few cases in vase-painting in which it would have been visible is not significant.³ vital parts of the chariot, harness, and team are regularly omitted.

The hoplite shield needed no *telamon* because it could not be slipped off the arm by a single action.⁴ The *πόρπαξ* was necessarily a fairly close fit, to obviate the risk of chafing and the fatigue of depending on the hand-grip to steady the shield. Some arm-bands of real shields found at Olympia are hinged,⁵ which implies that they had to be unfastened before the arm could be disengaged. This was probably an early experiment, for others from a group of sixteen shields recently discovered on the same site⁶ have no hinges and are of the bracelet shape so often depicted in red-figure vase-paintings, where they can be seen to be close-fitting.⁷ The distinctive feature of the hoplite shield is recognized in Plutarch's account of the heavy-armed corps of Perioeci equipped by Cleomenes III in the Macedonian fashion: διδάξας αὐτοὺς ἀντὶ δόρατος χρῆσθαι σαπίσῃ δι' ἀμφοτέρων καὶ τὴν ἀσπίδα φορεῖν δι' ὀχάνης, μὴ διὰ πόρπακος (*Vit. Cleom.* xi),⁸ and in Strabo's description of the Lusitanian shield: ἀσπίδιον δ' αὐτοὺς δέπου

¹ *v. supra*, p. 157, figs. 12 and 13.

² *v. supra*, p. 157, fig. 12, and p. 161, fig. 14.

³ It is absent from Assyrian reliefs although it is plain that on the march at least the shield was slung. The sword-belt is regularly represented, and it is possible that the artists did not wish to multiply parallel lines; or it may have been rendered in paint, which was freely used and of which few traces remain. I have come across only one example of an Assyrian shield *telamon* in relief, on pl. 23 of Layard's *Monuments of Nineveh*, vol. i.

⁴ The fate of the shield of Brasidas as narrated by Thucydides (*περιεργὸν δὲ τὴν δόλυσσάν*, iv. 12) is compatible with a close-fitting *πόρπαξ*, for *περι-* gives the information that the shield had to 'come off' like a ring (cf. *περιαρπείσθαι*), -*εργόν* that it slid into the sea. If Brasidas fell within the ship's side and his shield beyond it, the natural inference is that his encumbered left arm caught on the gunwale and that the *πόρπαξ* was wrenched loose by the strain. The relation of the structure of the hoplite shield to hoplite tactics has been discussed in 'The Hoplite Phalanx', *BSA*, xlii, pp. 76 ff. On the march the hoplite shield could of course be carried slung over the back by a strap passed through the *πόρπαξ*, and it is a fair inference from Thuc. vii. 75. 5 that it was normally so carried by the hoplite himself, at least if there was any reason to expect attack.

⁵ *Ql.* iv, p. 165, no. 1014 (with figure); Inv. no. 13004 is similar. ⁶ *Jb.* lii (1937), Olympiabericht, pl. xv, p. 55, fig. 24. To judge by their blazons, the shields are of the early sixth century or the very end of the seventh. The *πόρπαξ* measures 10.5 cm. (just over 4 in.) in width and height above the face of the shield. There are no holes for the attachment of a lining, but a leather cuff may have been worn.

⁷ See, e.g., *M&Z.* 394, 524.

⁸ ὀχάνη plainly has here the second meaning ascribed by the lexicographers to ὄχανον, viz. *δεσμός, λῶπος*. No special meaning attaches to the feminine form, which appears to be unique.

ἔχειν τὴν διάμετρον κοῖλον εἰς τὸ πρόσθεν τελαμῶσιν ἐξηρημένον· οὔτε γὰρ πόρπακας οὔτ' ἀντιλαβὰς ἔχει (iii. 6. 1).

Up to c. 700, therefore, all shields in use in the Aegæan area (and elsewhere) must have been single-grip shields of one form or another. On the mainland of Greece we have found two types of unknown origin, the round shield with 'pin and ring' boss first occurring in the eleventh century, and the Dipylon, which may be as ancient. The round shields which occur on Late Geometric vases are probably of several varieties, to judge by the evidence of temple votives, and that these new forms come from the Near East is generally accepted, because their occurrence coincides with that of Oriental imports and of Oriental traits in art. Helbig used principally Assyrian evidence, no doubt because of the number of monuments available and the precise and detailed nature of the representations;¹ but other forms current in other regions are more likely to have exercised direct influence on Greece. The Assyrian shield was flat, with a protruding central handle on the inside to which a flat circular omphalos, not invariably represented on the reliefs, corresponded on the outside. It has the form of a very shallow section of a cylinder and represents some means of strengthening the shield at the point where it was subjected to the greatest strain, viz. the junction of the hand-grip with the body of the shield. The latter generally exhibits on the inside and often on the outside as well a pattern like a brick wall; sometimes it is divided into quadrants by pairs of parallel lines and the spaces filled with hatching.² In either case the intention is almost certainly to represent wicker-work. Helbig's interpretation as strips of leather arranged in a 'darning' pattern was certainly suggested by his desire to assimilate the Assyrian to the Homeric shield, whose materials are confined to leather and bronze.³

¹ When we compare the archaeological data respecting eighth-century shields with the indications furnished by epic, it is at first sight surprising that Helbig's identification of the Homeric with the round, one-handed shield did not command immediate agreement. On reflection the failure is seen to be largely accounted for by the insufficiency of his archaeological evidence and by his omission to trace the course of the Oriental influence to which he rightly ascribed the introduction of the round shield—in this respect the absence of allusion to Cyprus is remarkable—and the lack of an adequate examination of the hoplite shield, the alternative and universally accepted candidate for the rôle of Homeric round shield. The omission was partly, but only partly, made good in his subsequent article on the date of the introduction of the hoplite phalanx ('Ueber die Einführungszeit der geschlossenen Phalanx', *K. Bay. Ak. Wiss. Sitzungsber.* 11) in which he showed that hoplite tactics were alien to Homeric warfare, but did not investigate the equally alien manipulation of the hoplite shield.

² Helbig, *op. cit.*, p. 20, fig. 9.

³ The shields used by Greek *φάλαγες* were probably often of osier, the material resorted to when it was necessary to improvise shields for an emergency; see Thuc. iv. 9. 1 (which furnishes an unnoticed example of *σάλας* in the sense of 'shields') and Aen. *Tact.* xxix. 12. The hoplite shield in early days seems sometimes to have been made of wood. Below three shields found at Olympia the earth was blackened as if by the carbonization of wood (*Ol. iv. Textb.*, pp. 163-4); the point is established by the recent discovery on the same site of a group of bronze shield rims and blazons to which fibres of wood were found adhering (*cf.* p. 172, n. 6, *supra*). The first group formed part of an Argive dedication of Corinthian spoils; the second may well be Corinthian also, for the blazons coincide strikingly with those on shields in proto-Corinthian vase-painting.

The Tiryns votives show that the perfectly flat shield with protruding handle was known in Greece at the very end of the Geometric age; that it was derived from Assyria is possible but hardly probable. It is a weakness in Helbig's article that he makes no attempt to trace the channel of communication. The lambda votives from Samos and the omphalos specimen from the Athenian Agora show that other forms were current in the Aegæan, and the occurrence of an actual specimen of the former in Cyprus suggests the island as its point of departure. If the flat shield is indeed of Assyrian origin, Cyprus is a likely transmitter, for from the eighth century onwards she must have had at least indirect relations with Assyria through the cities of the Phoenician coast, and long before she submitted to Sargon in 715 many individual Cypriot adventurers, if not regular contingents, may have served with the Phoenician armies which were repeatedly called on to resist Assyrian attack.

The shield described above is the normal shield of the Assyrian foot-soldier and is not far short of hoplite size,¹ but on occasion the Assyrian borrowed from his enemies shields which vary both in type and dimensions. We may note in particular two examples of an exceptionally large round shield with concentric circles which appear on reliefs from the palace of Sennacherib at Kuyunjik. One² is part of the loot taken from a captured city, unfortunately not identifiable but probably northern; the second,³ on which the central boss characteristic of the type is visible, is held by an Assyrian who screens an archer with it. The long series of Assyrian monuments show that from the early ninth century onwards round shields of various sizes were current in the Near East, including Armenia. Special importance attaches to the Vannic kingdom of Urartu, probably the ultimate source of another form of omphalos shield, which occurs first on Assyrian monuments but is not native to Assyria, though occasionally adopted there. In this case the omphalos is not flat but convex, with spherical curvature, and much more prominent than that of the Assyrian shield. Though we have no example *in corpore* to prove the point, it looks as if its object were not so much to strengthen the shield at a point of strain as to provide space for a hand-grip which was set in the plane of the shield and did not, like those of the Shardana, Pulesati, and Assyrians, project on the inner side, and to save the hand from contact with the surface and consequent injury from blows. There is no evidence for the existence of this shield in the Bronze Age. It is true that the shield on the Phaistos disk has a central circle with six others round the circumference; and at Luxor, on a relief representing the capture of Dapur by Ramses II,⁴ two shields on the Egyptian side, one slightly, the other more seriously

¹ An actual specimen in bronze, somewhat the largest of a group found at Nimrud, and now in the British Museum, measures 2 ft. 6 in. in diameter, i.e. a fraction over 76 cm. The diameter of the shields of the recently found group from Olympia, as calculated from the rim fragments, ranges from 80 cm. to 1 metre.

² *Op. cit.* ii, pl. 31.

³ Layard, *Mon. of Nineveh*, i, pl. 74.

⁴ *Fremdwörterbuch*, 404.

defaced, exhibit a central disk encircled by others.¹ That these represent metal plates is probable, but there is no suggestion that the central disk is convex. Though the *coiffure* of the owners on the Luxor relief is Egyptian, their shields are undoubtedly foreign, as are also their short, stabbing swords, which resemble those of the Shardana; probably they are mercenaries from Anatolia. At the very beginning of the Iron Age a shield with flat central omphalos appears on a series of reliefs, some of limestone, some of basalt, found at Tell Halaf² in northern Mesopotamia and dating probably to the eleventh century. In one instance it is carried by a foot-soldier, in all the others by horsemen who form what is probably the earliest representation of a corps of cavalry. It is small, as a cavalry shield necessarily is, with a marked rim and a central disk; the cutting back of the adjacent surface shows that a certain degree of relief is intended.³

In structure the Tell Halaf shield is identical with the Assyrian, though the material may be different. The type is doubtless far more ancient in the regions concerned than the monuments which afford the earliest representations of it and may well be that which found its way to Bronze Age Greece. It might no doubt be described as *ὀμφαλόεσσα*, but the epithet is more appropriate to the shield with a more prominent convex omphalos, generally associated with two or more concentric circles in relief and sometimes with a zone of subordinate bosses in addition, which we first encounter on the bronze reliefs from the Gates of Shalmaneser III (859-824) (Pl. VI, 4 a and b). Two examples with peripheral as well as central omphaloi are carried by horsemen in the service of the Assyrian king;⁴ but on the same reliefs it appears as the regular protection of the people of Urartu (kingdom of Van),⁵ against whom Shalmaneser conducted two campaigns and who also appear on the reliefs of the Gates. It is very small and has a central omphalos which despite the small scale appears to be clearly characterized as convex; otherwise it is plain, save that a few carefully executed examples have a couple of concentric circles as well. This is the shield which we have already seen in a larger form at Kuyunjik;⁶ and it is also the type of which

¹ In neither case can the number of these be determined, but on the better preserved example it was more than six, probably eight.

² Von Oppenheim, *Tell Halaf* (Eng. translation), pl. xviii b; A. Götz, *Hahiter, Churriter und Assyrier*, pl. 42. The reliefs were found forming part of the decoration of a building which belonged to the earliest stratum in which iron occurred, but bore unmistakable traces of having been removed from some earlier position. See von Oppenheim, *op. cit.*, pp. 141 ff.; Götz, *op. cit.*, pp. 87 ff. The date in the twelfth century assigned by the latter to Kapara, ruler of the earlier town in question, is generally considered to be rather too high; the eleventh is more probable.

³ This is marked on the example in the British Museum.

⁴ L. W. King, *Bronze Reliefs from the Gates of Shalmaneser*, pls. xv and xviii. Both figures appear in the Phoenician campaign of 859.

⁵ *Op. cit.*, pls. ix (upper register); one lies discarded by a fallen Urartian, to the right another is held by the central handle; xxxviii (upper register) and xlii.

⁶ For an example of normal, approximately hoplite, size see Layard, *Mon. of Nineveh*, ii, pl. 47.

Agamemnon's shield, stripped of its intrusive Gorgoneion and accompanying figures, is an elaborate version. Greek examples will be fully dealt with later; here it is sufficient to note that among the discarded votives of the archaic temple at Ialysos were two miniature bronze shields with central convex omphalos of which one had six concentric circles, the other two circles and bosses all round the rim.¹ This evidence and that of other models confirms the conclusion based on the carefully executed reliefs of the Gates that it is always with the convex omphalos that concentric circles are combined. They probably mark the rims of progressively diminishing layers of hide (or did so in an earlier stage), and they are naturally absent from the wicker-work shield of Assyria. That both varieties of the type—that with central and peripheral bosses and that with central boss and concentric circles only—are of Anatolian origin is probable. Though the early history of the Urartians is obscure, they are believed to have come eastward to Lake Van from Anatolia. It is therefore possible that their form of shield was widely distributed in Asia Minor and that early Greek settlers in Ionia would find it in use.

The cylindrical omphalos has a range as wide as that of the convex and like it penetrated far westwards. In Assyria it found no place on metal shields, if we may judge by examples found by Layard at Nimrud;² farther west it sometimes kept its place when the entire shield was translated into metal (cf. p. 178, *infra*, n. 8).

It is unfortunately impossible to determine the home of a large round shield which appears on a relief from the palace of Sennacherib at Kuyunjik.³ As it is exhibited in profile, the shape of its omphalos is displayed; it consists of two cylinders, the smaller surmounting the larger. The rim is in well-marked relief. Though carried by an Assyrian, the shield is of alien origin; the man walks last in a procession which bears the spoils of a captured city, consisting principally of the images of the conquered deities. The shield must be a votive from a temple, and this is doubtless the reason why it has no telamon, and the bearer has improvised one by passing a band under the omphalos and over his shoulder.⁴ Of the city concerned it can be definitely said that it was not Babylonian; probably it was situated in the mountain region north of Assyria. On the whole, however, it looks as if the cylindrical omphalos was a Mesopotamian invention designed for the wicker-work shield characteristic of that area, while the convex omphalos, though occasionally adopted by the Assyrians, originated in Anatolia.

Cyprus has yielded an exceptional number and variety of shields *in corpore*, in the form of miniature votives and as adjuncts of terra-cotta

¹ *v. supra*, p. 169, n. 4.

² *Nimrud and Babylon* (1853), pp. 193-4; abridged edition (1874), pp. 63-4.

³ Layard, *Mon. of Nineveh*, ii, pl. 30; Kunze, *KBR.*, p. 57, fig. 1.

⁴ Compare the struggles of the looter with the large shield with concentric circles, *op. cit.* i, pl. 74.

figurines. One of these types, whose distinguishing characteristic is a sharp spike projecting from the centre,¹ need not be considered here, since there is no evidence that it was ever adopted within the Aegaeon area; moreover, it is unlikely that such a spike would be called an omphalos. For the omphalos shield there is abundant evidence. The Swedes found two bronze bosses in a tomb at Amathus, in a Geometric context;² the description 'a disk-shaped base with a curved boss in the middle' suggests the convex type. The concentric circle shield was also known in the island. The shield of a warrior figurine in New York (Cesnola Coll. 2099) is plainly of this type; the circles are merely painted, the boss is plastic, a roughly pinched projection of indefinite shape (Pl. VIII, 3).³ One found by the Swedes (*S.C.E.* ii, pl. cxciv, 2) has a shield with a central omphalos and a zone of peripheral bosses. A small terra-cotta votive from the Larnaka region now in the Ashmolean Museum has an equally indeterminate boss; the form, however, is definitely conical on a terra-cotta votive in the British Museum (C 1005), on another in the Cyprus Museum, and on the shields of two figurines, viz. a warrior in the Cyprus Museum (*S.C.E.* ii, pl. ccxxi, 8) and the archer's shield-bearer in New York.⁴ Probably the cone was the normal Cypriot form.⁵ Some though not all of these examples have concentric circles in paint; the models regularly have the single hand-grip (which in Cyprus probably represents the real form) and the warriors hold theirs as only single-grip shields could be held. Of the lambda shield no more need be said. It is only an occasional visitor to the Aegaeon area and can hardly be described as an omphalos shield.

We have already noted the miniature bronze shields with convex omphalos from Rhodes, an inevitable intermediate stopping-place for

¹ An actual spike shield from a tomb at Amathus has long been known (P. et C. iii, p. 871, fig. 630) and the metal remains of several (flat disk with projecting central spike) have since been found by the Swedes at Idalion (*S.C.E.* ii, p. 578, pl. clxxv). Spike shields are also carried by two of the assailants of a city engraved on the famous silver bowl said to be from the above-mentioned tomb (*JHS.* liii, 1933, pp. 25 ff., pls. 1 and 3). The left-handmost of the defenders has a shield which can be seen in spite of damage to have a small central boss, a concentric circle, a zone of bosses, and a distinct rim. The Amathus spike shield was originally published by Colonna-Ceccaldi (*Monumenti antiques de Chypre*, p. 139, pl. ix). Though it measures only 12 in. in diameter, there is no reason to regard it as anything but an actual or a model shield, though it has sometimes been taken for a shield-boss. The spiked target used as a weapon of offence by the Highlanders at Killiecrankie, Prestonpans, Culloden, and elsewhere was no larger; see C. P. Lawson, *History of the Uniforms of the British Army*, vol. ii, p. 67, and fig. 30, and Morier's painting of the Battle of Culloden in Windsor Castle Library. There are three small bronze models of spike shields in the archaic material from the temple dump at Ialysos, approximately the limit of their extension westwards.

² *Swedish Cyprus Expedition*, ii, p. 117, no. 38, and p. 118, no. 51, pl. xxiv. The reproduction rather suggests a pronounced cylinder omphalos.

³ From a photograph kindly supplied by the Metropolitan Museum of New York; cf. *JHS.* xvii (1897), p. 168, and see p. 157.

⁴ *c. infra*, pp. 296-7 and Pl. XXII, 3.

⁵ Whether the shields with conical bosses carried by Sardinian figures have anything to do with Cyprus must remain for the present an open question. See P. et C. iv, p. 15, fig. 5; pp. 65-7, figs. 51-4; pp. 68-9, figs. 57-8.

shipping *en route* between Cyprus and the Aegean. Crete, an equally inevitable port of call or depot for traffic between Cyprus and Greece, is prolific of omphalos shields. Two examples from the Idaean cave have, the one a plain, peaked omphalos, the other a shallow cylinder, slightly decorated.¹ A miniature votive has a plain cylindrical omphalos.² The deposit of votives from the Altar Hill at Praisos³ yielded a small model of a shield with convex omphalos. From the same site comes an archaic terra-cotta relief of a warrior who carries a shield with a shallow cylindrical omphalos; a second somewhat similar relief in New York has a counterpart from the same mould in the British Museum.⁴ The military character of the bronze objects in the Praisos find leaves little room for doubt that two bronze disks with omphalos found by Hogarth in the Dictaeon cave at Psychro also represent shields.⁵

An open-work bronze stand from the Idaean cave,⁶ assignable on grounds of style to the end of the Geometric age, includes in its design five figures of warriors; they carry round shields with omphaloi of a roughly peaked shape. Two of the highly decorated shields from the Idaean cave furnish representations of the omphalos type. No. 3 (*KBR.*, pl. 5) illustrates a round shield with a large plain, apparently convex, omphalos surrounded by very small bosses arranged in three concentric circles. No. 6 (the Hunt shield)⁷ has, besides the eccentric Dipylon shields already discussed, three varieties of the round shield. The archer of the inner zone has a shield of medium size with a convex omphalos surmounting a stepped cylinder like that on the relief from Kuyunjik surrounded by five circles of small bosses (pls. 14 and 20). The swordsman in the same zone (pl. 14) has a large shield with central convex omphalos surrounded by six circles of small bosses, one of twenty-three considerably larger bosses and four of small bosses. If the circles of small bosses were translated into plain circles in relief, we should have an almost exact counterpart of the shield of Agamemnon in its original form, without the intrusive Gorgoneion.⁸ In

¹ Kunze, *KBR.*, pls. 33 and 34. The shields are at earliest of the late eighth century, more probably of the seventh.

² *Ibid.*, pl. 51 f; cf. p. 54.

³ *BSA.* viii, p. 258. Bonanquet stated that the find included, besides other pieces of real armour, 'the central part of a shield decorated with concentric circles, all crushed and in miserable condition'. A shield so decorated can hardly have been anything but an omphalos shield. Of the twelve miniature votives recorded (*BSA.* xi, p. 356) eleven were exhibited in the museum at Herakleion in 1938, the twelfth having probably disappeared in the earthquake of 1926. Apart from the example with omphalos cited above, all were of hoplite type.

⁴ *Met. Mus. Studies*, iii, p. 310, figs. 1 and 2.

⁵ *BSA.* vi, p. 169, fig. 41. These shields also could not be found in 1938. To judge by the two drawings, the omphalos was convex, in one case surrounded by four smaller ones.

⁶ Halbherr e Orsi, *Mon. di B.*, pl. xi; Karo, *Archiv für Rel.-Wiss.* viii (1905), Beiheft für Usener, pp. 62 ff., figs. 1-9. The greater part is reproduced in *Met. Mus. Studies*, iii, p. 210, fig. 3. Kunze's reference to Maraghiannis, *Antiquités Crétoises*, i, pl. 42, is an error.

⁷ Kunze, pls. 10-20 and Beilage 1, a drawing of Kunze's magnificent reconstruction.

⁸ A shield of this type from a Greek grave of the early seventh century at Cumae shows the western range of this originally Oriental form. Though of full size, being about 70 cm. in diameter, it is a mere simulacrum made for the tomb, inasmuch as it is extremely thin, yet

the outer zone horseman and kneeling archer alike have a very small shield with convex omphalos and three or four circles of small bosses. None of the round shields has a rim.

The design on a Geometric seal-stone of steatite from Siphnos¹ (Pl. VI, 5) furnishes another example of the omphalos shield. The subject is a warrior who strides to the left (speaking in terms of the impression) and carries on his left arm a small round shield with a rim in relief and a large central omphalos; on his right shoulder he poises an immense spear.

The scanty evidence which mainland Greece affords concerning the single-grip shield has already been reviewed so far as it is of Geometric date. A few traces, however, survive in the seventh century; the most important are furnished by a small group of lead figurines from Sparta. These represent warriors armed with shields of the omphalos and concentric circle type;² the omphalos in some cases is not visible. Most have a non-Corinthian helmet (cheek-pieces do not by themselves make a Corinthian helmet; v. *infra*, p. 235), and, as far as can be seen, no greaves; i.e. the equipment is entirely pre-hoplite, as we should expect to find it in the earliest years of the seventh century, the date at which the stratum in question begins. It must have been entirely superseded by the middle, as indeed is indicated by the very great preponderance of hoplites in the total of warrior figurines. Nevertheless the next³ and even the succeeding⁴ stratum offer a few versions of the pre-hoplite type, possibly produced by old-fashioned moulds which had survived. There are, however, mixed types,⁵ and the treatment of the shields is in other ways extremely conservative. Blazons do not appear before the sixth century and throughout

shows no trace of having had any kind of backing. The attachment, however, of a central hand-grip could be traced on the inside. The cylindrical omphalos is decorated with a small central boss and circle in relief, the face with a series of concentric circles alternating with zones of very small bosses (*Mon. Ant.* xiii (1903), p. 246, fig. 14; *Österr. Jahrb.* xii (1909), p. 61, fig. 44). Whether Helbig, who used this shield to elucidate Homeric phraseology, was right in regarding it as the type which the Aeolic Greeks who founded Cumae brought with them from their motherland may be doubted. Similar shields, also simulacra, have been found in a number of contemporary Etruscan tombs, a fact which confirms indeed the derivation of the type from Anatolia, but suggests that the Cumaeian specimen was an Etruscan product (Ducati, *Storia dell' Arte Etrusca*, pp. 130-1, pl. 38, nos. 127 and 128). Nor is it possible to fix the derivation of a bronze convex omphalos surrounded by concentric circles, a relic of an actual shield, found at Trebenishte on the outskirts of the Greek world (Filow, *Die archaische Nekropole von Trebenishte*, p. 85, fig. 100, 3).

¹ *JHS.* lviii (1938), p. 232, fig. 10. It is believed to be of local workmanship. The resemblance of the shield to the Urartian type is marked.

² *AO.*, pl. clxxxiii, no. 8 (no. 6 appears to be an omphalos shield of a somewhat different type). Lead I (c. 700-635 B.C.).

³ *Op. cit.*, pl. xcxi, 17, apparently non-hoplite. Lead II (c. 635-600). To the same stratum belong a nude male torso and a figurine of a goddess, both carrying concentric circle shields; the place of the central omphalos is masked. P. 272, fig. 125 *b* and *d*.

⁴ *Op. cit.*, pls. xcvi, 13 and 16 (non-hoplite); possibly 5, which is otherwise hoplite. Lead III and IV (c. 600-500).

⁵ e.g. p. 263, fig. 122 *a*, where a shield with a zone of bosses is held at arm's length, a position impossible with a hoplite shield. The position of the central omphalos is masked by the spear of the owner, who wears Corinthian helmet, greaves, and omega plate-corset.

it the commonest types are those which had prevailed in proto-Corinthian vase-painting and had elsewhere become rare or obsolete: whirl ornament, wheel, cock, flying bird, &c. The evidence of the figurines at least establishes the fact that in her latest pre-hoplite days Sparta had been familiar with the omphalos shield. There is not a single example of the hour-glass form.

On three large lunate fibulae from Boeotia¹ warriors by land and sea are shown equipped with a small round shield whose omphalos is represented by a circle with a large central dot; in one case there is a zone of bosses as well. The helmets are non-Corinthian. Geometric technique, as we have seen, lived on in seventh-century Boeotia and the equipment may be merely traditional; alternatively, there are marked traces of foreign influence of which the naked goddess on the first of the three specimens is the most striking. As has been argued above, there is no evidence that Boeotia lagged behind in adopting hoplite armour. A Boeotian moulded pithos in Boston² of the late seventh century decorated with heroic subjects shows the same mixture of armature as we find in proto-Corinthian vase-painting and Attic black-figure; three men marching in file have Corinthian helmets and their shields have the curvature and off-set rim of the hoplite shield. One is plain; the other two have by way of blazon a small round shield with concentric circles and central and peripheral bosses. Even so, on the Hymettus amphora the outmoded Dipylon shield figures as a blazon on the new model. The men of the pithos, however, have no greaves and carry two spears each. Two Boeotian terra-cottas in the Loeb Collection³ which represent horsemen carrying shields with omphaloi in relief can hardly be earlier than the fifth century. The horseman could not use a hoplite shield; sometimes he has a pelta,⁴ sometimes a small round shield.

To sum up, we have definite proof that the omphalos shield was used in Crete and Rhodes, natural stepping-stones between Cyprus and the Aegaeon, as Cyprus herself was between the Near East and Crete, and a fair amount of evidence that it was also current in the Peloponnese (Spartan figurines), in the Aegaeon (Samos votives, Siphnos gem, Skyros shield-boss), in Attica (votive clay model from the Agora and iron shield-boss from Kynosarges), and possibly, on the evidence of the fibulae, in Boeotia. Farther north we have indeed the Kardhitza figurine with hour-glass shield, but also in Macedonia the bronze shield-bosses of the seventh century from Chauchitza. For Ionia we must deplore, not for the last time, that direct evidence is altogether lacking; but if she did not get the shield in question by sea, she may well, as already suggested, have encountered it on land. One form of it, as we have learned from the shield-bosses of the Kerameikos, the first colonists may have brought with them from Greece.

¹ Hampe, pls. 3, 4, and 5.

² Ibid., pls. 36, 38, and 39.

³ Sieveking, *Die Terrakotten der Sammlung Loeb*, i, p. 3, pl. v.

⁴ e.g. *MuZ.* 247.

Apart from the omphalos, most of what Homer tells us about the round shield is common to all one-handed shields and can be illustrated from Greek monuments of the Bronze Age. Even the omphalos was, as we have seen, not wholly unknown in the Bronze Age Aegaeon and among the Peoples of the Sea,¹ with whom the Mycenaeans must have been in contact; they may have used it themselves. In epic, however, the word is almost certainly an addition of the Early Iron Age. Apart from allusions, rare but unmistakable, to the body-shield, we have little hope that by examining the epic we shall be able to discriminate between traditional matter incorporated by the poet and original descriptions of the warfare of his own day. Many formulae may be ancient; they would remain as applicable as on the day when they were first coined.

As already indicated, there are traces in Homer of the older armature, but they are few. An incontestable example of the body-shield is that of Periphetes (*O* 645-7), described as *ποθηρεκής*, unique as epithet of a shield, on whose rim the owner trips to his undoing, a mishap inconceivable with the Dipylon or Boeotian shield. It is perhaps not accidental that the victim is expressly said to be a man of Mycenae, the principal seat of Minoan influence in Greece, whence comes our evidence for the use of the body-shield on the mainland. There is no other mention in Homer of the Mycenaeans, who should form the core of Agamemnon's immediate following. Though there is no doubt what happened to Periphetes, the precise meaning of the principal verb of which he is the subject² is, significantly enough, uncertain, and its use without parallel. The description of the shield as *ἔπρος ἀρόντων* is unique, eminently appropriate to the *σάκος ἥντε πύργον* planted like a miniature wall in the *αὐτοσπαδίῃ* (sc. *ἐσμήνῃ*) in which, again appropriately, Aias is second to none.³ That the epic tradition of the great shield is ultimately derived, through the Achaeans, from Peloponnesian usage of the sixteenth and fifteenth centuries appears, however surprising, to be the most probable hypothesis.

Though in two of his more spectacular appearances (as champion against Hector and as the protector of Teukros) we shall find Aias as a wielder of the round shield, behind this figure we can discern another, older and more shadowy, who is still so dominated by the ancient tradition that alone of the first-class heroes he never wears a corslet. In Homer's hands indeed he becomes a creature of flesh and blood, as solid a creation

¹ *v. supra*, pp. 190 and 174-5.

² 'Staggered' perhaps comes nearest to the proper significance of *πέλλομαι* or possibly 'stumbled on to'; cf. *Υ* 483, where *ἐκπαρό* is best taken as 'was shaken out'. The ancient v.l. *ἄρο* has suggested to some editors the emendation *ἐπ' ἄρογ'* *ἐπαρό* from *ἐλλομαι* with Ionic *spiritus lenis*, but this is no more appropriate than the vulgate. Van Leeuwen (*Ilias*, ad loc.) accepts the emendation, but none the less interprets the verb as the 2nd aorist of *πέλλομαι*. For possible instances, however, of confusion between the two verbs see the same scholar's *EDE.*, §§ 274 and 150, 50.

³ *N* 525. *αὐτοσπαδίῃ*, which is *ἀν. λεγ.*, may have a more restricted meaning than the five times repeated *σπαδίῃ*, which merely excludes the use of the throwing-spear (*O* 282-3).

as any of the secondary characters; but his footing in heroic society is precarious. His mother's name is unknown, his father's is little more than a joke; he has as yet no son, and when in post-Homeric literature he acquires one, the child's name is equally fictitious. Telamon is not as yet an Aeacid and consequently is not the brother of Peleus; as late as Pherecydes the relationship is not established.¹ The position of Teukros is doubtful (cf. *Θ* 284 and *O* 439); the very name suggests a late entry into the story.² The connexion of Aias with Salamis is admittedly late and artificial and, apart from the entry in the *Catalogue*, is mentioned only once in Homer (*H* 199). It is vain to look for any historical substance behind a figure who is 'real' indeed because Homer created him, but has none of those local attachments which give his insignificant namesake as sound a claim as any hero of the Trojan War to be an historical character. The great Aias seems to be some legendary figure of the remote past, the type of the perfect warrior as he was in the days when the body-shield held sway.³ One passage (*Σ* 404-5) makes it certain that it was his original equipment, perhaps in the 'tower' form, since in a formula reserved for him alone he is thrice described as *φέρον σάκος ἥτε πύργον*.⁴ He is struck by the spear of Hector full on the chest, where the two telamons of shield and sword are 'stretched'; they save him from a wound. This can only mean that his shield was flung behind his back, as it is in *A* 545, and as we see the shields on the Lion-hunt dagger-blade, and that he was hit where the two belts cross; and they could cross only if one hung from the right and the other from the left shoulder. Only the body-shield equipment provides this combination; obviously the hand-grip shield must hang, like the sword, from the right shoulder, as it does in the representation of the Griffin-slayer. After the body-shield had gone out *Σ* 404-5 ceased to be a precise description of anything that could actually happen, but by hearers of the Sea-raid period and all succeeding generations would be understood of a moment when the hand-grip shield was flung behind the back. The lack of precision in the expression, which does not actually mention crossing, may be due to an effort to adapt the incident to contemporary equipment. In *N* 709-11, where we learn that one of the duties of the comrades of Aias was to relieve him of his *σάκος* when he was exhausted, it is possible that we have a relic of body-shield tactics.

If only because of the owner's vitality, however, the shield of Aias was doomed to suffer a change. In the duel with Hector (*H* 219 ff.), the passage which for later Greeks established the exceptional size of his shield, it has become a round, one-handled shield with central omphalos; this is guaran-

¹ Apollodorus, III, xii. 6.

² For the Attic Teukros see Vurtheim, *Teukros und Teukrer*, p. 8, and the literature there quoted.

³ He is expressly said to be Achilles' equal in the 'stationary' fight to which the body-shield is adapted; in speed he cannot vie with him (*N* 324-5).

⁴ *H* 219, *A* 485, *P* 128.

teed by the phrase μέσσον ἐπομφάλιον (267). It is true that it was made by a σκυτοτόμος and not, like the shield of Sarpedon (*M* 295) which is so closely akin to it, by a χαλκεύς, which may conceivably be a relic of Bronze Age tradition, though to produce any form of shield composed of several layers of hide must have demanded some skill in leather-working. Everything else at least in the description, which does not mention the omphalos, suits a round shield, large indeed, but much smaller than a body-shield. Seven entire hides plus a bronze facing would result in a fantastically heavy body-shield, whether eight-shaped or of the tower type, nor is there any reason to think that more than one was ever used. A round shield might have several layers, especially as they need not all have been of equal diameter and probably never were. The concentric circles in relief which are commonly associated with a central omphalos¹ probably represent the structure of a type which consisted of three or four rounds of hide which diminished from the inner face of the shield outwards. Such seems to be the structure of the shield of Aineias (*Y* 274-81) whose bronze and leather are said to be thinnest just within the rim; the spear which hit it at this point crashed through, διὰ δ' ἀμφοτέρους ἔλε κύκλους, showing that here there was only a single hide.² The shield is called παντός' εἴση; κύκλους (if any doubt is felt about the epithet) shows that it was round. Sarpedon's shield, which is of precisely the same type, had many layers of hide; that of Teukros (*O* 479) had four, and so had that which Odysseus used in his fight with the Suitors (*χ* 122).³

The next episode (*Θ* 266 ff.) in which the shield of Aias figures will be fully discussed in the chapter on the Bow (*infra*, pp. 296-7). It adds nothing directly to our knowledge of the shield, but it may be noted in passing that the manœuvre as described would be possible only with the hand-grip shield and that it was practised in Assyria. It is exemplified on a relief from Sennacherib's palace at Kuyunjik⁴ on which an archer is screened by a companion equipped with a shield of exceptional size and of the omphalos and concentric circle type. The only epithet which *Θ* adds to the shield of Aias is φαεινόν, appropriate to the facing of bronze;⁵ in *A* 527 it is called εὐρείη, and Aias is recognized by its exceptional width, not the most noticeable dimension of a body-shield, and still less of the hour-glass.

¹ Of the small bronze votives from Ialysos one had four and another five concentric circles.

² Unnecessary difficulties, as it seems to me, have been made over the phrase ἀμφοτέρω δ' ἔπειρ' ἑνὸς βόδου. As the thickness of a hide is practically uniform, ἑνὸς must mean leather, and as the metal facing was certainly on the outside, εἰς applies to the course of the spear, which penetrates first the bronze and then the hide.

³ According to Wackernagel (*Sprachliche Untersuchungen zu Homer*, p. 241) προθέλων in *N* 130, though nowhere else, is equivalent to τετραθέλων, standing to it in somewhat the same relation as τριφάλεια to τετραφάλειος and τρέπεζα to τετράπους. This is much the most satisfactory explanation of a perplexing epithet. προθέλων would offer a convenient metrical variant for τετραθέλων, even as in a number of passages the Aeolic πέντες does for τέσσαρες, but its ambiguity would tend to bring about its disappearance. Elsewhere the meaning is 'from the roots' or 'foundations', προ- having its ordinary derivation and meaning.

⁴ *Mon. of Nin.* ii, pl. 31.

⁵ As is that of αἰόλον in *Π* 107.

A 545 reiterates the epithet ἐπταβόειον, probably a direct allusion to the passage in *H* since the adjective does not occur again. The slow and intermittent retreat of 563-74 could only be carried out with a telamon shield alternately flung behind the back (545;¹ cf. *Θ* 94²) and brought forward again at each return to face the enemy; but no further particulars emerge.

The Aristeia of Diomedes in *E* has suffered severely from reworking; the inconsistencies to which this has given rise will be discussed in the section on the thorex. Here it is enough to point out that his is a round shield, for the telamon passes over the right shoulder, as appears from two lines—98 and 798—which there is no reason to suspect. The poet in fact calls it κύκλος (797); that the epithet is nowhere else used in the singular is not enough to stamp the line as an interpolation.³

The shield of Hector is often quoted as a clear example of the body-shield because it is said (*Z* 117) to reach from neck to ankle. It is strange that a hero should set out on a three-mile run through country held by the Trojans carrying so great a weight, and that moreover in a position warranted to make it flay his ankles. Everywhere else it has the characteristics of a round shield; it has an omphalos (*N* 192) and is repeatedly called πάντοῦ ἔσση (*H* 250, *A* 61, *N* 803). Moreover, all the other appearances of the body-shield are, as they should be, on the Greek side, for it is certain that this highly localized method of fighting was never carried abroad. Its incongruous emergence here is not a survival, but the error of the poet, who knew that shields too large for those οἷα νῦν ἔσονται εἶσι were a proper piece of heroic equipment, a touch to enhance Hector's martial excellence immediately before two episodes designed to bring out his human value.

The shields of individual heroes which have any distinguishing feature have now been passed in review and have been found to be for the most part round. That Reichel's use of the telamon as a criterion of the body-shield is unjustified has been shown by an examination of the round shield in the Bronze and the Early Iron Age. Not only is its use implied in certain manœuvres (*A* 545, *Θ* 94); twice in the *Iliad* it is ascribed to shields which are indubitably round; that of Agamemnon (*A* 38) with its circles and that of Sarpedon (*M* 401), explicitly described as round in *M* 297. The commoner epithets of the shield also point to the round form. It is true that ὀμφαλόεσσα, which occurs eleven times in the *Iliad* and once in the *Odyssey*, exclusively as an epithet of the shield, has been variously regarded. So far as the formation of the word goes, it may equally well mean 'having an omphalos' (which would naturally be central) or 'having many omphaloi'; as we have seen, some shields combine both features. In support of the first meaning ἀφφύοις and ὠρώεις may be quoted, both like

¹ The whole passage is 'modern' in feeling; note the simile of the little boys and the donkey, so severe a trial to translators in the eighteenth century.

² Cf. Leaf, *ad loc.*

³ A variant ἀφφύοις is recorded by Eustathius and occurs in Pap. Hib. 20.

ὀμφαλόεσσα derived from nouns denoting parts of the body, but used in a transferred sense. We have no representation of the body-shield to which the epithet would apply in its first sense; in the second it might be used of no. 3 on p. 141 and p. 142, fig. 5 *supra* (LH I), no. 9 on p. 146 (the very latest phase of LM III), and of the shields on the dubious Boeotian gold ring. If the latter is genuine, the bosses, major and minor, are a LH III addition to the LH I model. Of the small shields which appear in the latter part of LH III (pp. 146-8, nos. 1-5 *supra*) the representations do not permit us to judge, but the extreme scantiness of the evidence for bosses, single or numerous, on contemporary shields in the east half of the Mediterranean has been noted.

Reichel tried, as he was bound to do, to capture the epithet for the body-shield and referred it to the peak into which the eight-shaped shield rises in the middle owing to the pinching in of the sides. The peak, however, is in fact a ridge, as the spindle-shaped vertical strengthening on the Tiryns and Knossos frescoes shows; there is nothing circular about it and it is too ill defined an area to suggest the image of an omphalos to any normal eye.

Nor is the meaning 'with many omphaloi' generally appropriate to the Homeric shield. The shield of Aias which Hector hits with a stone *μέσσον ἐπομφάλιον* (*H* 267) is plainly conceived as having a central boss which at least dwarfs all the others; so is that of Hector (*N* 192). Moreover, the omphalos of the wagon-yoke round which was wound the thong attaching it to the pole must have been solitary, and the yoke is called *ὀμφαλόεν* (*Ω* 269). Only the shield of Agamemnon is stated to have, in addition to its central boss of cyanus, twenty of tin which must have formed a circle round it (*Δ* 33-4) and we have found this type of decoration on a few of the miniature votives representing concentric circle shields.

Lippold, whose essay *Griechische Schilde* appeared in 1909, just too early to profit by Helbig's article published in the same year, could find so little evidence for the existence of the omphalos shield in Greek lands that he denied it altogether and explained the omphalos as the entire convex surface bounded by the offset rim of the hoplite shield, with which, like Reichel and, except Helbig, all who came after him, he identified the Homeric round shield. At that date evidence was of course meagre, though it is surprising that like Helbig he made no use of Cypriot material or of the miniature shield votives from the Dictaeon cave and Praisos (*supra*, p. 178).

On balance, *ὀμφαλόεσσα* seems best translated as 'with (conspicuous) omphalos', a description applicable to all shields with a central disk or central protuberance, such as we have found on various monuments from the Near East in the course of the Iron Age. The omphalos shield is used by Trojans and Achaeans alike,¹ and has therefore every claim to be

¹ *Δ* 443 = *Θ* 62, *Μ* 161, *Ν* 264, *Π* 114, *Τ* 360.

regarded as the typical shield of the period. It sometimes appears to be comparatively small, for twice a man is wounded in the abdomen under its lower edge.¹ This might well happen in the case of some of the round shields depicted on Geometric vases, but hardly with the hour-glass, and certainly not with the body-shield. Wounds, however, are elsewhere dealt not as here *ὅπ' ἀσπίδος* but *παρ' ἀσπίδος* or *παρ' ἀσπίδα*, which suggests a larger size,² like that also recorded on Geometric vases, whose diameter is approximately equal to the height of the hour-glass shield. Further, *πάντος ἔϊση*, the most frequent of all the epithets of the shield, has never by anyone but Reichel been supposed to mean anything but round.³ Apart from the case of Hector discussed above, it is applied to the shields of the following heroes: Menelaos, *I* 347, *P* 7 and 43; Paris, *I* 356; Aineias, *E* 300 and *Y* 274; Odysseus, *A* 434; Sarpedon, *M* 294; Deiphobos, *N* 157, 160; Idomeneus, *N* 405; this shield is also called *διωστή* (having concentric circles?) and is said to be fitted with two *κανόνες* (*v. infra*, pp. 192 ff.); Aretos, *P* 517; Agenor, *Φ* 581; Diomedes, *Ψ* 818. It is thus distributed impartially between Greeks and Trojans. The phrase, opening with *ἀσπίς* in an oblique case, occurs only at the end of the line and only in the singular; it forms the second half of a hexameter. *εὐκυκλος*, on the other hand, with the single exception already mentioned, is used in the plural only, occurring four times, viz. *E* 453 and *M* 426, where the round shield is ascribed certainly to the Greeks, less probably to the Trojans as well (*v. infra*, p. 195, *init.*), *N* 715, where the Locrians are said to lack it, an exception, it is implied, to the general rule, and *Ξ* 428, where it is ascribed to the Trojan side. The use of *εὐκυκλος* therefore coincides with that of *πάντος ἔϊση*, and of *ὀμφαλοέσση*. As these are the only constant epithets of the shield and are of general application, they must be appropriate to the equipment of the poet's own day. Certain passages show that the normal tactics are those of the hand-grip shield, e.g. *H* 238-41, where Hector enumerates his military accomplishments. The phrase *ἐπὶ δεξιᾷ, ἐπ' ἀριστερά νομῆσαι βῶν* aptly describes the parrying movements of the hand-grip shield, of which neither the body-shield nor the hoplite shield is capable.⁴ *ἐπαῖξαι* in 240 agrees with this interpretation, for it describes the brief forward rushes of the *πρόμαχοι*. We have found the shield of Aineias to be round; when he *ἔδλῃ καὶ ἀπὸ ἔθεν ἀσπίδ' ἀνέσχευεν* (*Y* 278), he executed a manoeuvre unsuited alike to body-shield and hoplite shield; but on the Geometric vases cited above for evidence of the hand-grip shield we have seen how the warrior

¹ *A* 259-60, 424.

² Cf. the advice of Poseidon to the Achaeans, *Ξ* 376-7.

³ Except of course by those who regard *ἔϊση* as a *vocabulum obscurum* (Schulze, *QE.*, p. 89, n. 3); it is now, however, generally accepted as an archaic form of *ἴση*. There is nothing to be said in favour of the division of the words as *πάντων ἴση*, since it is not applicable to the cases of *δοῖς* and *ταῖς*.

⁴ Cf. the fragment of a Spartan *ἐμβατήριον* (*Carmina Popularia*, D 18 = B* Tyrtæus 15) *λαίῃ μὲν ἵππιν προβάλλουσι δόρυ δ' ἐνστάμενος πάλλοντες*, which describes the advance of the hoplite covering his left side.

might hold his shield at arm's length in the hope that his opponent's spear, even if it pierced his defence, would not reach his person.

Similarly, the followers of Asios advance upon the wall of the Greek camp βόας αἶας ὑφός' ἀνασχόμενοι (*M* 137-8), a gesture well illustrated in Assyrian representations of siege scenes. Shields therefore were of moderate size and all the epithets which bear on their shape, πάντοσ' εἶση, ὀμφαλόεσσα, εὐκυκλος, stamp them as round—with the single exception of the simile ἥτε πύργον thrice applied to the σάκος of Aias, which we have found to be exceptional.

None the less, traces of the body-shield, reliable if scanty, have been found, and more may be discoverable. The fact that the epic has two words for shield, σάκος and ἀσπίς, is possibly significant. It is at first sight surprising that whereas the origin of ἀσπίς is wholly unknown, σάκος, which if a distinction can be drawn must be the body-shield, is generally accepted as Indo-European, being represented in Sanskrit by *tvāh*, a skin or hide.¹ If σάκος, however, had the same meaning, it would be natural enough for the Greeks to apply it to the Minoan body-shield, which is a virtually entire bull's hide with the hair on. ἀσπίς may be its native name. Like θώρηξ and ξίφος which are also of unknown origin, ἀσπίς runs through Greek literature, prose and poetry, from beginning to end, with unchanged meaning. σάκος we may surmise to have dropped out of current speech when the body-shield disappeared, since it was not specially appropriate to the round shield, while there was nothing to prevent ἀσπίς being transferred to the new form since whatever its original meaning, in Greek ears it would have no descriptive quality. This hypothesis derives some support from the formal arming scenes of which there are several, all made on one pattern, but differing in detail. These will be fully described below.

The constant epithets of σάκος—μέγα and στιβαρόν—tell us nothing; it is more significant that it never appropriates the more revealing descriptions attached to ἀσπίς—πάντοσ' εἶση, εὐκυκλος, ὀμφαλόεσσα. While the enormous influence of the metrical formula must always be borne in mind, there can be no doubt that if any poet at any stage of the tradition had wished to describe the σάκος as round or as having an omphalos, he would have had no difficulty in doing so. σάκος is the only term applied to the shield of Aias, which as we have seen started life as the Bronze Age body-shield. No such definite tradition attaches to that of Achilles, yet it is always called σάκος save once, when Thetis, giving the order for it, uses the inclusive term, as a woman (or goddess) naturally might (*Σ* 458). As in the case of Aias, however, the distinction has broken down, for in *T* 374 this same shield is compared to the moon, which certainly implies that it is round, and in *Υ* 261 the son of Peleus σάκος μὲν ἀπὸ ξο ἔσχετο χεῖρ, a manoeuvre only possible with the shield with central handle.

¹ See Boisacq, *Dict. ét. de la langue grecque*; Bechtel, *Lexilogus zu Homer*, s.v. σάκος; Bechtel, however, holds that ἀσπίς and σάκος (s.v. σάκος) originally denoted the 'Mycenaean' body-shield.

A few phrases may be fossilized formulae handed down from Bronze Age days. The words *σάκε' ὠμοῖσι κλίναντες* (*A* 593 = *N* 488) have been taken to mean that the lower edges rested on the ground; the comrades of Odysseus in *ξ* 479 sleep under their *σάκεα*, and the suggestion that these are body-shields gains some plausibility from the fact that Cretan influence is marked on all the false but realistic tales told by Odysseus. The comrades of Diomedes in *K* 152 have their heads pillowed on their *ἀσπίδες*. Above all, the description *πάντοσ' εἶσθ* with its archaic form and its fixed place in the verse, together with the precisely similar character of *νῆες εἶσθαι* and *δαυρὸς εἶσθης*, words which doubtless belong to the earliest stages of heroic vocabulary, leads to the conclusion that all three are Bronze Age formulae which had come to form part of the stock-in-trade of the *δοιδός*.

If we proceed to examine the arming scenes in detail, we find that one feature is common to all alike, and proves that each shield, whatever its shape, has a telamon; it is always assumed before the helmet, to avoid the inconvenience of passing the telamon over the crest.¹ This, however, only serves to differentiate it from the hoplite shield, which was naturally picked up last of all, as can be seen in numbers of arming scenes depicted on red-figured vases.

Though they are of one general pattern, the four great arming-scenes are by no means replicas one of another. None represents the era of the body-shield, when the equipment included neither *κημιῖδες* nor *θυρήξ*. It is possible that a Bronze Age formula is preserved in the lines (*O* 479-82) which describe the arming of Teukros when, abandoning his archery, he assumes only shield, helmet, and a single spear in place of the pair characteristic of the Early Iron Age.

The arming of Paris (*I'* 328 ff.) and that of Patroklos agree in almost all points and follow what may well have been the formula of the later period of LH III, which we have found to admit a corslet of a sort and leggings. We have the choice of supposing these to be denoted by *θυρήξ* and *κημιῖδες*, or of regarding the lines as an interpolation made after hoplite armour had been introduced. To proceed with *I'*, the shield is called by the traditional name of *σάκος* and the verb which governs it is *βάλετο*, denoting the passing of the telamon over the head; there is only one spear, *ἐγχος*. Thus the vulgate; a variant, however, is recorded, preferred by Zenodotus,² according to which 334-5 are athenized and after the line on the spear the following was inserted: *ἀμφὶ δ' ἄρ' ὠμοῖσιν βάλετ' ἀσπίδα τετραπόδισσαν*.³

¹ The reason was appreciated by the ancient commentators; see Schol. A on *A* 32.

² Schol. A on *I'* 334. It may be noted that the word in the vulgate is *σάκος*, in the variant *δομῆς*.

³ If the form *τετραπόδισσαν* is genuine, it is presumably formed, however incorrectly, from *τετραπόδιον* and means *σῆμα*; cf. *M* 137. It is more probable, however, that Robert's conjecture *τερμυδέσσαν* is correct, since this appears as an epithet of Achilles' *ἀσπίς* carried by Patroklos (*Π* 803). The meaning remains uncertain. The traditional explanation (Schol. ad *τ* 242, Hesych. s.v.) is *ποδὴρηγ* = *ποδὴραγῆς*.

The reason for the alteration presumably was that Paris was already wearing his sword when fighting as an archer (*T* 17-18)—a hypercritical objection, since he would necessarily take it off to assume the corslet and then put it on again. Aristarchus rejected the variant on the ground of the order—ἐναντίως τῷ Ὀμηρικῷ ὅπλισμῳ.

The arming of Patroklos differs from that of Paris in one point only; in place of the single ἔγχος he takes a pair of throwing-spears (δοῦρε), an Iron Age innovation, which also emphasizes the fact that he cannot wield the famous spear of Achilles.¹ The original framework still persists in the greatly amplified arming-scenes in *T* (369-91) and *A* (16-46), though both show modifications. In *T* the shield is still σάκος but the verb is ἐλαιο, 'picked up', i.e. by the central handle; βάλετο 'flung', i.e. the telamon over the head (*II* 135), was applicable also to the body-shield. For a while the old formula had served well enough, but as the body-shield receded farther and farther into the past, one more precisely descriptive took its place.

The last and most elaborate arming-scene, that of Agamemnon, contains many peculiarities. The old order is adhered to, as it necessarily was while the telamon shield survived, but for the first time in a formal arming-scene the shield is called ἀσπίς, and the verb ἀν' . . . ἔλειτο emphasizes that the first step is to lift it off the ground. It is described as ἀμφιβρότη, 'coming round both sides of a man', an epithet originally designed for the body-shield, both forms of which are seen on the monuments to have a deep curvature within which the figure of the warrior disappears. The adjective is inappropriate to the round shield, which is sometimes quite flat and which, because its rim lies in one plane, cannot envelop the bearer even when it is convex. ἀμφιβρότη, which is used only with ἀσπίς² and, apart from *B* 389, only in contexts which show that the shield in question is round (that of Agamemnon, *A* 32, that of Sarpedon, *M* 402, that of Aeneias, *Y* 281), must have acquired in epic the general meaning of 'man-protecting';³ the fact that it occurs only four times in the vulgate suggests that in Homer's day it was almost obsolete, and the variant of *E* 797 already discussed (p. 186) shows how readily it (and much else) could disappear in the course of oral transmission by the substitution of metrical equivalents.

The second epithet of Agamemnon's shield (πολυδαίδαλος) is merely conventional; the third (θοῶρις), inappropriate to a body-shield and, incidentally, to the hoplite shield, is suitable enough to one which could be

¹ The fact is indeed rather over-emphasized; Zenodotus was very possibly right in athetizing 140 and omitting 141-4 as borrowed from *T* 388-91. For the instructed hearer the change in noun and number would be a sufficient hint.

² Since ἀσπίς is apparently the indigenous word for shield, presumably it originally denoted the body-shield.

³ In other contexts the true sense of course remains patent; thus Empedocles (Fr. 148 Diels*) calls the body the earthly envelope of the soul, ἀμφιβρότην χθόνα. Nor was it wholly ignored by ancient commentators on Homer, ὅτι ἀνδρομήκευ αἱ ἀσπίδες is the comment of Schol. *A* on *A* 32.

extended at arm's length and brandished and might perhaps deal a blow. The epithet is rare, being only once again in Homer applied to a shield, viz. that of Aineias (*Y* 162), which we have already seen to be circular. It is also, however, used of the aegis (*O* 308), which, a storm-cloud when wielded by Zeus, has all the characteristics of a shield when lent to Athene or Apollo. *σακέσπαλος*, the corresponding epithet of the shield's owner, is applied in *E* 126 to Tydeus and does not occur again in Homer,¹ but the verb is used in the *Scutum* (320-1) of 'swinging' the *σάκος*. The early disappearance of both epithets from Greek literature corresponds to the disappearance of the hand-grip shield from actual life, at least in the upper social strata.

The ensuing lines (*A* 33-5) give an unmistakable picture of the shield with omphalos and concentric circles, with some poetic exaggeration in the number of circles and the material of the central omphalos and that of the subsidiary bosses. With these lines the description which follows is wholly inconsistent, nor has it any counterpart in art. The central omphalos elaborated into a Gorgoneion and surrounded by figures has indeed a certain resemblance to the Cretan votives with protome, for the only possible meaning of *ἐπ'* . . . *ἐστεφάνωτο*, unusual though it be, is 'set like a crown upon';² but the Gorgoneion has no place on the Cretan shields. It first appears as a shield blazon on a proto-Corinthian aryballos of *c.* 650,³ where it does not form a central ornament, but fills the entire field. This type continues for some time; later it appears reduced in size as a central ornament with no further decoration. *περί* implies that the two figures of Deimos and Phobos encircle the Gorgoneion; the rare cases in which *περί* = *ἀμφί* in Homer occur where the preposition is compounded with *δεξιός* or with certain parts of *βαίνω* and are accounted for by metrical

¹ Until Callimachus (*H.* i. 71) revives it with the general sense of *πολεμιστής*, *πολεμικός*, by which Hesychius and Suidas render it, *σακέσπαλος* is not to be found in Greek literature after Homer. This is natural enough, for after the introduction of the hoplite phalanx the hand-grip shield sank to be the defence of the light-armed in Greece. None the less Robert's proposed emendation of *σακέσπαλος* for the meaningless *σακεσφόρος* in Eur. *Phoen.* 139 (*Oedipus*, i, p. 450) is probably correct, since the Aetolians are described by Thucydides as fighting with throwing-spears (iii, 97, 3, 98, 1 and 2), and throwing-spear implies hand-grip shield. Robert based his emendation only on the association of the epithet with Diomedes in the *Iliad*, *ἀσπίδοστροφός* or *ἀσπίδοστροφός* (*Ag.* 825), altered by Blomfield to *ἀσπίδοστροφός*, may well be Aeschylus' version of *σακέσπαλος*; it is not easy to see why so simple and obvious an epithet as *ἀσπίδοστροφός* should have been corrupted. *ἐπ'ἀλλοθεν ἔειπεν* (Eur. *Ion*, 210) is based on epic vocabulary, as the lines in the *Scutum* show. It is possible that the unique epithet *θερεσσόκης* (*Sent.* 13) applied to the Kadmeioi may be a recognition of the Boeotian shield as the heroic shield of Thebes.

² Elsewhere the verb is used of something which encircles; cf. the closely parallel passage *E* 739, also *Σ* 485, *κ* 195, and *O* 153. From the last two passages the idea of 'crown' or 'wreath' has wholly disappeared.

³ Johansen, *V.S.*, pl. 34, 2; cf. Payne, *Neocorinthia*, pp. 80-1. It may be added that in the seventh- and sixth-century vase-painting the Gorgoneion frequently serves as the shield blazon of Achilles. In the sixth it is often assigned to Aias, appearing incongruously on the Boeotian shield, sometimes to other heroic figures, such as Kadmos and Geryon. See *MuZ.* iii (a), nos. 147, 174, 175; (b) 229, 234; (c) 197, 226.

necessity. Four figures (two sphinxes and two lions) are necessary to fill the zone which surrounds the protruding lion's head on the bronze shield of Idaean type from Palaioakastro;¹ but the elongated bodies of the lions in the inner zone of the Hunt shield show how easily the space might be filled by two human figures and a couple of conventional ornaments such as palmettes. Deimos and Phobos occur elsewhere in the *Iliad*, the latter as the son and both as attendants of Ares;² Eris was his sister³ and her associates Alke and Ioke may therefore be presumed also to have had human forms.⁴ In the seventh century we are in the age of personifications on the Chest of Cypselus; Eris figures as a hideous hag and Phobos, a man with a lion's head, as the blazon of the shield of Agamemnon.⁵ Some analogous work of art may have suggested his lines to our interpolator, whose aim must have been not to add his couplet, but to substitute it for 33-5.⁶ Apart from other difficulties of spacing, it cannot have escaped the notice of the dullest of would-be interpolators that his Gorgoneion must occupy the same position in space as the omphalos of cyanus in the original passage. His version apparently survived as a variant until it was disastrously incorporated in the text. His description, probably in the main fanciful, may have been inspired by the appearance of the Gorgoneion as a blazon on heroic shields in contemporary art.

To sum up the story of the Homeric shield: Reichel's case, monstrously as he over-pressed it, contains a germ of truth; it is possible, though but rarely, to trace the body-shield in Homer. On the other hand, since his principal criteria of the body-shield—the mention of a telamon or of leather as the fabric—have proved to be fallacious, the majority of his identifications, being dependent on them, fall to the ground. Such epithets as μέγα and στίβαρον, ταύρεος and βόειος are equally applicable to the one-handed shield, which as we have seen was well established before the end of the Bronze Age. Protective armour underwent no vital alteration between the date of the Warrior vase and that of the introduction of hoplite equipment. Hence it was that through the centuries and in Homer's own day the descriptions of armour and fighting remained perfectly intelligible to the successive generations which listened to the recitation of heroic poetry, even if the objects to which they applied had undergone certain minor changes. Only when we have reason to suspect post-Homeric interpolation, e.g. of the hoplite corslet or the Gorgoneion, do we encounter the absurd, the inconsistent, and the unintelligible; and by that time the hearers, trained on the New

¹ *BSA*, xi, pl. xvi, p. 306; Poulsen, *Der Orient*, p. 78, fig. 76.

² *Δ* 440, *N* 279, *O* 119.

³ *Δ* 441.

⁴ *E* 740. 739-42 form an interpolation of the same type as *Δ* 36-7.

⁵ Paus. v. 19. 2 and 4.

⁶ A shield found at Carchemish offers some interesting points of contact in that it has a central Gorgoneion surrounded by five zones of running animals. The shield was probably carried in the final encounter in which Carchemish perished in 604 B.C. The Gorgoneion marks it as possibly Hellenic; Woolley suggests that it may have belonged to an Ionian mercenary in the service of Egypt. See *Carchemish*, ii, pl. 24, p. 128.

Model of the hoplite army, were no longer familiar by experience with the tactics of the heroic age and were prepared to accept much at the hands of the ancients.

When we compare the archaeological data respecting eighth-century shields with the indications furnished by epic, it is at first sight surprising that Helbig's identification of the Homeric *danis pávroo' éion* with the one-handed shield did not command immediate assent. The failure, however, is largely accounted for by the insufficiency of his archaeological evidence, by his omission to trace the possible course of the Oriental influence to which he rightly ascribed the introduction of the round shield—the absence of any allusion to Cyprus and Crete is remarkable—and by the lack of an adequate examination of the hoplite shield, the alternative and universally accepted candidate for the rôle of the Homeric round shield. The omission was partly, but only partly, made good in his subsequent article¹ on the date of the introduction of the hoplite phalanx in which he showed that hoplite tactics were alien to Homeric warfare, but did not investigate the equally alien manipulation of the hoplite shield.

NOTE ON KANÓNEE

Two shields in the *Iliad* are specified as having *kanóves*, those of Nestor (Θ 193) and Idomeneus (N 497); the word does not recur in connexion with shields in any other author. The first passage tells us nothing except that both shield and *kanóves* are of gold. In the second the shield is called *mívroo' éion* and *danorj*; the latter word is obscure, but may mean 'with concentric circles', as suggested above.

The word *kanós* is of foreign, probably Sumerian, origin; it occurs in the Semitic languages, through one or other of which it must have become known to the Greeks.² In later Greek *káva*, from the same root, is used to denote the pole-reed (*Harundo donax*) which is extremely abundant in Mesopotamia. Pollux (10. 183-4) says that it was used principally for fencing, for which purpose it was doubtless imported in the days of the Athenian empire, extant literary allusions to it, which are scanty, appear to be confined to Hipponax and Old Comedy. Neither *kanós* nor *káva* is used in Greek to denote the measuring reed (𐎧𐎫𐎷𐎵) of the O.T.,³ which is rendered in the Septuagint by *kálamos*; in this meaning Homer uses simply *métra* (M 422). The only other sense in which Homer uses it is to denote the horizontal rods of the upright loom (Ψ 761; see Leaf, ad loc.). It is doubtless on this second use, coupled with the fact that in later Greek *kanón* when applied to a material object invariably designates something straight, often mathematically straight, that H. Oppel, author of an exhaustive study of the word in all its uses,⁴ bases his conclusion that the *kanóves* of the shield must also have been absolutely straight. This is hardly warranted, for, as Oppel himself points out, if the *kanóves* of Nestor's shield were golden, the original meaning of the word must have been forgotten. The etymology suggests

¹ Über die Einführungszeit der geschlossenen Phalanx', *K. Bay. Ak. Wiss., Sitzungs.*, 1911.

² The termination -*ós*, however, appears to be Greek.

³ e.g. Ezekiel xlii. 16.

⁴ *Suppl. Philologus*, xxx (1937).

that the Greeks learned it through contact with the Near East, but it may at first have meant to them only a particular contrivance, with no association of either material or shape.

Lexicographers and scholiasts agree that the *κανόνες* were not the *πόρπαξ* and *ἀντιλαβή* of the hoplite shield. Hesychius says that they were *αἱ τῆς ἀσπίδος ῥάβδοι, ἀφ' ὧν ὁ τελαμὼν ἐξήπτο*. Schol. B on Θ 193 calls them *τὰς ῥάβδους αἷς ἐκράτουν τὰς ἀσπίδας*. He continues: *οὕτω γὰρ ἐχρῶντο τοῖς πόρπαξι, οὓς ὄχαρα ἐκάλεον· ὑστερον γὰρ οὗτοι ἐπενοήθησαν ὑπὸ Κερῶν, ὡς καὶ Ἀνακρέων φησὶ Καριέρ- γεος ὄχάροις. Ἐπεὶ οὐδ' ἐκ πόρπακος εἶχον τὰς ἀσπίδας ἡρτημένας, ἀλλ' ἐκ τελαμῶνων· διὰ τοῦτο πρὸς τὸ κατευθύνειν αὐτὰς ἐχρῶντο κανόνας, δύο σχήματα ἀποτελοῦντα ἐργασάμενοι.*¹ The same note appears in a somewhat shorter form in Schol. A and in *Et. Mag.* Though, like the solution of Hesychius, it excludes the *πόρπαξ*, it appears to offer an alternative explanation; but it is not easy to see what this is. It is plain that the last clause is corrupt or defective; conceivably it should read *κανόνας δυεῖν, σχήματι χι ἀποτελοῦντας ἐργασάμενοι*.

When we turn to the archaeological record in search of any part of a shield that might be identified with the *κανόνες* the result is disappointing, alike in the Late Bronze and in the Early Iron Age. Neither side of the Warrior vase has anything to offer, though both give at least a partial view of the inside of the shield; the inner face of the Griffin-slayer's exhibits only concentric circles, and those of the Pulesati and Shardana nothing more than the hand-grip.

The Assyrian reliefs yield more data. The inner face of the round shield is frequently represented; sometimes it is plain, but often it is covered by a brick-wall pattern which is believed to represent wicker-work. Sometimes this pattern is replaced by a large cross the spaces within and without which are filled by hatching. In an example figured by Helbig² the skeleton of the cross is formed by two vertical bars, between which the hand-grip appears, and a single horizontal, which passes under it. It seems certain that we have here a frame-work designed to maintain the shape of a shield which might otherwise warp, as one of wicker-work well might. Greek monuments of the Geometric and archaic periods are, with one exception, barren. Bronze votives hardly ever show even a central handle on the inner face, much less give any indication of structure. Terra-cottas often reproduce a central handle, sometimes a *πόρπαξ* and *ἀντιλαβή*, but never give any hint of a frame-work—with the exception of the Dipylon votive. This, it will be remembered, has some claim to be regarded as of wicker-work and has a vertical stave indicated in paint on the outer face and a crossed pair on the inner. Neither this nor any other monument indicates the telamon or the means of its attachment.

The Homeric examples of the word differ from all others in being very much older. Even if they go no farther back than the eighth century, they are earlier by some 300 years than the next appearance. The introduction of the word, however, may fall much earlier and date to the period of Graeco-Oriental contacts in the Late Bronze Age. In the fourteenth century the inhabitants of

¹ It is odd that Anacreon rather than Herodotus should be cited as the authority for the invention of *ὄχαρα* (expressly equated to the *πόρπαξ*) by the Carians; for the historian's statement is explicit, whereas the allusive epithet of the poet does not of itself imply invention. In any case the statement *οὕτω γὰρ ἐχρῶντο τοῖς πόρπαξι* must rest ultimately on Herodotus.

² Helbig, *HR.*, p. 20, fig. 9.

Greece adopted an Oriental form of shield. With the days of Mycenaean settlement in Ugarit the importation of *Harundo donax* for shield staves may have begun. In this case the name, divorced from association with any particular material, might well continue in ordinary use so long as the one-handed shield survived; but it may be noted that Homer, though he knows the weaver's rod by this name, fails to mention the *καρών* in connexion with the balance (e.g. *M* 433), and has a Greek word (*στέθμῳ*) for the carpenter's rule or its equivalent in cord, the first object to be designated by *καρών* in post-epic Greek.

There can be little doubt that in connexion with the shield rods to keep it in shape suit the original meaning and subsequent applications of *καρών* better than any other interpretation. The word is wholly inappropriate to the arm-band and hand-grip of the hoplite shield with which the *καρώνες* have sometimes been identified. Helbig, indeed, maintained this; his original interpretation,¹ holding that the fact that they are so rarely mentioned shows that *καρώνες* were just coming in; but as the term is never in later Greek used in connexion with shields, it is reasonable to conclude that the thing for which they stood ceased to exist. Certainly they seem to have been exceptional in Homer's day, but the need for them would disappear when shields had a metal facing; moreover, their use is more natural with wicker-work than with leather. That wicker shields were used in Greece down to a fairly late date appears certain,² and such may well have had a stiffening framework. If we disregard Oppel's criterion of absolute straightness in the *καρών*, we have an example in the Dipylon votive. The upper ends of the cross-staves, situated just above the scallops, would be excellent points for the attachment of the telamon, which must have put a great strain on the fabric, especially of a large and heavy shield.

The entry in Hesychius is probably correct, but it is extremely unlikely that it is based on traditional information. The Greeks were always familiar with the hand-grip shield in the form of the *πύργος* and also knew of shields made of leather, wood, and wicker, a knowledge which must have been greatly extended by the campaigns of Alexander. *ἀρεπασπίζειν*, the verb which denotes in prose the action of Aias as 'archer's protector', first appears in Hellenistic Greek, in its literal sense when the actions of barbarians are described; it soon acquires a general sense of 'protecting'. An examination of barbarian shields, some varieties of which could probably be seen from time to time in Alexandria, together with a natural interpretation of the word *καρώνες*, might well lead to the right conclusion.

2. THE ΛΑΙΣΗΪΟΝ

There remains one piece of defensive armour, the mysterious *laiscēion*, which occurs in a twice-used formula (*E* 452-3. *M* 425-6):

δῶρον ἀλλήλων ἀμφὶ στήθεσσι βοείας
ἀσπίδος κύκλους λαισῆϊά τε πτερόεντα.

¹ *HR.*, p. 6 f.; cf. *HE.*, p. 325. Oddly enough, Helbig does not in either passage use a possible argument in favour of the hoplite shield, viz. that Idomeneus does not, like Aineias in a similar predicament (*Y* 278), hold his shield away from him, but merely squats behind it.

² See the authorities cited by Helbig, *HR.*, p. 20, n. 17, and p. 70.

Ancient authorities are probably right in regarding *τε* of the second line as distributive, and assigning the *ἀσπίδας* to the Greeks, the *λαισήϊα* to the Trojans.

Apart from discussions in the Homeric scholia and the lexica, the *λαισήϊον* is mentioned only twice in Greek literature. Herodotus (vii. 91) says that it was a shield of raw ox-hide carried *ἀντ' ἀσπίδων* by the Cilicians in Xerxes' army. Hybrias the Cretan,¹ a poet of a date quite uncertain but certainly not earlier than the sixth century, speaks of his *καλὸν λαισήϊον, πρόβλημα χρωτός*. The views of the Greek commentators on the interpretation of the word may be summarized as follows. Two forms of shield are contrasted in the formula, the *εὐκύκλος ἀσπίς* and the *λαισήϊον*. As the former is circular, the latter cannot be; it must be oblong or oval; *κατ' ἀντιπαράθεσιν τῶν εὐκύκλων παραμύκεις τὰ λαισήϊα* (Schol. A ad *M* 426) or *lunate*; *τῇ λαίῃ παλλόμενα Ἀμαζονικά* (Schol. T ad loc. cit.). The scholia are fragmentary and not worth quoting in full; the ground is covered by the entries s.v. in Hesychius: *θυρεοῦ γένος, ἐπεὶ δασέα ἐστὶ τὸ βύρσαις αἰγείαις περιβεβλησθαι. πτερόεντα ἢ πάνυ κοῦφα, ὡς καὶ τῇ λαίῃ χειρὶ δύνασθαι βαστάζεσθαι, ὅπλα λεία, ὅπερ ἐστὶ δασέα, αἰγείαις βύρσαις περιβεβλημένα ἐτι τὰς τρίχας ἔχουσας*, and *El. Mag.* *μικρὰ ἀσπίδισκια ὁμοβύρσαι· ἐστὶ δὲ βαρβαρικὸν ὄπλον· γίνεται παρὰ τὸ λα ἐπιτατικὸν καὶ τὸ σενὼ τὸ ὀρμῶ· ἢ παρὰ τὸ ἐν τῇ λαίῃ βαστάζεσθαι· ἢ παρὰ τὸ λείον, ἀπὸ τοῦ ὁμαίς βύρσαις περιβεβλησθαι*. The only explanation offered of *πτερόεντα* is *κοῦφα*, which Porphyrius (Schol. B on *E* 453) justifies by quoting *T* 386. The lexica add nothing.

The *θυρεός* or 'door-like' shield was used by the Achaeans up to the days of the Achaean League, when they were persuaded by Philopœmen to exchange it for the standard Argolic, i.e. hoplite, shield.²

It is obvious that the statements of the ancient commentators have no historical or archaeological value. Having learned from Herodotus and perhaps another source as well³ that the *λαισήϊον* was an Anatolian shield of raw hide, they naturally assigned it as a *βαρβαρικὸν ὄπλον*⁴ to the Trojans, reserving the *ἀσπίς* for the Greeks. After the seventh century, if no earlier, the *ἀσπίδες* of this passage, though described as *βόειαι*, would be assumed to mean the hoplite shield, its ordinary sense in classical prose when Greeks are spoken of; in fact the contrast implied in the *παλλόμενα Ἀμαζονικά* of Schol. T also implies the assumption that the *ἀσπίς* had a *πόρπαξ*. The distributive use of the copulative is quite in order⁵ and the sense given to the passage is correct. What *πτερόεντα* means we cannot say; the word suggests a fringe, perhaps of leather strips.⁶ It is, however,

¹ *Anth. Lyr. Gr.* li. p. 128.

² *Pans.* viii. 50. 1.

³ The mention of *βύρσαις αἰγείαις* suggests a source other than Herodotus.

⁴ In spite of having given the hoplite his name, *ὄπλον* in the sense of shield remains a term of very general application. In *Thuc.* vii. 75. 3 it is plainly used to include the cavalry shield.

⁵ Cf. *Scutum*, 190, an unmistakable example of the distributive use.

⁶ An apron is sometimes shown suspended from the hoplite shield on r.f. vases; but there is

improbable that *εὐκέκλους*, a standing epithet of *ἀσπίς* and occupying its invariable position in the line, was meant to indicate a contrast of shapes.

3. THE THOREX

Like his analysis of the shield, Reichel's criticism of the thorex was vitiated by his failure to recognize any system of armature intermediate between the Minoan body-shield without corslet and the 'Ionian', i.e. hoplite, panoply. He was thus obliged not merely to maintain that all mentions of a metal corslet were interpolations (in which he was right) but, having the verb *θωρήσσειν*, *θωρήσσεσθαι* on his hands in a large number of contexts which did not lend themselves to expurgation, to assert that the original meaning of thorex was collective ('equipment') and that the verb merely meant 'to arm'. It hardly needed a Carl Robert to point out¹ that there is no instance in Greek of a collective in -ξ and that in Homer the part is played by neuters plural, *τεύχεα*, *ἐντεα*, and occasionally *ὄπλα*. That a non-metallic corslet existed in Mycenaean days was fully conceded by Robert on the evidence of the Warrior vase, and also the fact that it could be pierced with comparative ease and therefore would not necessarily be mentioned in every case of a wound inflicted in this way; but with a curious perversity he refused to admit that the verb *θωρήσσεσθαι* could refer to it except possibly in a few exceptional cases. It must have been worn, he says, in the camp as well as in the field; a man would not have to assume it on the call to arms, and the verb *θωρήσσεσθαι* must therefore normally refer to the plate corslet alone. This is an unproved assumption, sufficiently improbable in itself; there is no reason why a leather corslet should have been worn off duty, especially in the heat of the campaigning season. Robert may have thought like Reichel that hoplite armour went back into the eighth century; now that the first decade of the seventh century is known to be the earliest date to which it can be pushed up, we must either on this view of *θωρήσσεσθαι* bring down the *Iliad* to a date somewhat later still or accept a great increase in the number of interpolations. All that Robert did was to show that mere failure to mention the thorex by no means proves that a non-metallic corslet was not present to the imagination of the poet. If we admit that the verb *θωρήσσεσθαι* refers to this piece of armour and dates from its introduction, offering a metrical alternative to *κορύσσεσθαι*,² the only interpolations which we

apparently no earlier Greek evidence for such an arrangement. On an Etruscan gold ring in the Louvre, however (Furtwängler, *Ant. Gemmen*, iii, p. 84, fig. 57; Nachod, *Der Reittanzgen bei den Italikern*, pl. iii, 48), a small round shield with central boss is shown attached, Assyrian fashion, behind a chariot; two flaps hang from its lower edge. Conceivably the prolongation of the horseman's shield on the cremation urn from Moulana (*supra*, p. 154, fig. 10) is to be similarly explained.

¹ *Studien zur Ilias*, pp. 27 ff.

² Both verbs are rare in the active—*θωρήσσειν* is used some half-dozen times in the sense of cause (the troops) to arm, *κορύσσειν* (*πρόλεμαν*) once, *B* 273.

shall have to admit (and they must be conceded) are passages in which the thorex either reduces the context to nonsense or is unmistakably metallic.

Shirts of mail in the form of scale corslets were early in use at the eastern end of the Mediterranean. Our earliest direct evidence comes from the site of Nuzi in upper Mesopotamia near Kirkuk and from that settlement on it which began c. 1500 and was destroyed by the Assyrians c. 1350. Here a considerable number of scales was found dispersed over the site as well as one deposit which formed a great part of the breast of a corslet. There was also a number of tablets with cuneiform inscriptions recording inventories of military material from which it has been possible to extract curious information about the structure of the scale corslet.¹ This settlement was Hurrite; its principal feature was a large palace.

The 200 shirts of mail which Thothmes III captured at Megiddo (1478) must have been of this type, which recurs on monuments from the time of his successor Amenophis II (1447-1420) onwards. Two figure in the wall-paintings of the tomb of his chief steward Ken-Amun;² they are painted yellow, which in the opinion of the editor represents either bronze or (since they represent tribute paid to the Pharaoh) possibly gold.

On the chariot of Thothmes IV (1420-1411) there is a detailed representation of one worn by a Semite prince (Fig. 16).³ It is belted round the waist and has a high collar and short sleeves; though it is completely covered with scales, it has been pierced by an arrow.

Among the stores of military equipment depicted in the wall-paintings of the tomb of Ramses III in the Valley of the Kings are scale corslets piled, or hanging, in groups, one above another (Fig. 17).⁴ All are covered throughout with scales, which are carefully rendered and bear a remarkably close resemblance to one type of the scales found at Nuzi. All have collars and short sleeves, composed in each case of either two rows of normal scales or one of large ones. A very remarkable feature is that the scales are divided into transverse bands of different colours, yellow, red, and green, to which in two cases a deep blue is added. How far the colours of the Egyptian artist corresponded to reality and those of Champollion's reproducer to his model are open questions. Owing to the general fading of colour which all Egyptian painted monuments have suffered since their discovery, even the second is beyond settlement; in each case, however, there must be a substratum of reality, and it must be presumed that in the case of elaborate corslets scales of different materials were employed and

¹ Starr, *Nuzi*, I, pp. 475 ff., pl. 126, A-K; for the tablets see App. D, pp. 340-1.

² Davies, *The Tomb of Ken-Amun at Thebes*, pp. 27-8 and nr. 1, p. 23 and pl. xxiv a.

³ Carter-Newberry, *The Tomb of Thoutmosis IV*, pl. x. This gives an outline drawing of the subject on the right-hand side of the king's chariot, and the scales find no place in it. As they are not mentioned in the text, they must have been first discovered on a later examination, for they appear in the reproduction of the Semite given by Wolf, *Die Bewaffnung des altägyptischen Heeres*, p. 96, fig. 67 from a photograph in the *Fremdvölker* series.

⁴ Champollion, *Mon.* iii. 262. Fig. 17 is reproduced from Wolf, op. cit., p. 97, fig. 69.

arranged in bands. It is permissible to conjecture that yellow stands for gold, red for bronze, and that blue may represent the blue glaze paste known (like the lapis lazuli which it simulated) as cyanus. In the case of a parade corslet made for show only the material is not inappropriate.



FIG. 16



FIG. 17

Fragments of the corslet of Sheshonk I, who reigned in the tenth century, survive; they consist of a few bronze scales attached to a leather backing.¹

A scale corslet is worn with a belt by the king of the Enkomi draught-box (Pl. XI, 1)² who drives a-hunting; his horse has similar protection. In battle-scenes the scale corslet first appears associated with the chariot (as in the case of the Semite prince, *supra*) and is worn especially by the driver who cannot manipulate a shield as well as the reins. The Nuzi tablets also mention coats of mail for horses, though the excavators were unable to identify scales for this purpose. As the quarry in the scene in question is a bull, a coat of mail for the horse is not out of place. The driver has none.

The box belongs to the Mycenaean group of ivory carvings of mixed style recently studied by R. D. Barnett.³ Claiming the artist as Mycenaean, he is inclined to regard his patron and the subject as Hurrite; such a combination might well exist in the neighbouring Ugarit. The corslet

¹ Prisse d'Avennes, *Mon. Ég.*, pl. 46, 3; Wolf, *Bewaffnung*, p. 98, fig. 70.

² *Exc. in Cyp.*, pl. I.

³ *PEQ.*, 1939, pp. 4 ff., esp. pp. 9-12.

he regards as a Hurrite invention, a view which derives confirmation from the discovery of metal scales in considerable quantities not only in Hurrite Nuzi but in Ugarit, where they date to the end of the fifteenth and to the fourteenth century, when Hurrite influence is marked. That the place of origin is somewhere in the Near East¹ is certain.

Though the most prominent and probably the earliest, the scale corslet is not the only form known in the eastern part of the Mediterranean towards the end of the Bronze Age. Evans and Hans Bonnet have both called attention to a very simple form of breastplate, certainly, as Bonnet claims, non-metallic, worn by some of the soldiers of Ramses II. It consists of a short, close-fitting garment extending from the level of the nipples to the waist, generally supported by broad shoulder-straps; it is decorated by rows of dots or wavy lines which can hardly represent anything but stitching.² Bonnet states that it is almost invariably rendered in white, which suggests that the material is linen, probably thickly wadded. Evans connects it with the corslets of the chariot tablets found at Knossos;³ these, however, expand from above downwards and give the impression of being much longer. They may, alternatively, be related to a second and longer Egyptian form which reached to mid-thigh but otherwise appears to be of the same structure as the first.⁴ It is worn by the Shardana guards of Ramses II whose reproduction by Rosellini's draughtsman has been found to be unreliable in detail, but the outline is no doubt correct. That some form of non-metallic corslet was worn by charioteers in Crete towards the end of the fifteenth century is, however, certain.

Another type of corslet is worn by the Philistine and Shardan contingents in the great Land and Sea Raid undertaken against Egypt in the reign of Ramses III and recorded on the walls of the main temple at Medinet Habu (Pl. IV, 2).⁵ It differs in nearly every respect from the scale corslet; it is short, stopping at the waist, it has no collar, and not only has no sleeves but is scooped out at the shoulders to give the freest possible play to the arms. It may be noted that these forces do not use the bow or fight from the chariot, differing in these respects from the wearers of the scale corslet. The structure of the Shardan corslet is curious; it is

¹ See Flinders Petrie, *Tools and Weapons*, p. 38.

² Bonnet, *Die Waffen der Völker des Alten Orients*, pp. 210-11, fig. 104 A. Cf. Champollion, *Mon.* 14, 18, 30, 34, and Lepsius, *Denkmäler aus Ägypten und Nubien*, 314, and *Medinet Habu* i, 'Early Historical Records', pl. 30.

³ *P. of M.* iv, p. 863 with inset.

⁴ Bonnet, p. 210, fig. 104 B.

⁵ University of Chicago Oriental Institute Publications, vol. viii; *Medinet Habu*, vol. i, 'Early Historical Records of Ramses III', pl. 57 and especially pl. 30, which gives details from pl. 37 on a larger scale. The scenes are from the Sea-battle, in which the very large majority of the Philistines and Shardana wear ribbed corslets. In the Land-battle, scenes from which are reproduced on pl. 34, most wear the chiton only; a possible explanation is that in a land-battle where it might be necessary to cover great distances, the weight of the corslet was not thought to be adequately offset by the extra protection it afforded. In a sea-battle, especially in boarding operations, it might often be impossible to avoid exposing the chest.

formed of a number of narrow parallel plates, almost certainly metallic, which are not horizontal, but curve upwards to meet in pairs along the line of the breast-bone and are apparently intended to suggest the ribs which lie beneath them. Underneath the corslet is worn what is described by some writers, e.g. by Bonnet, as a kilt, but appears to be a chiton, for sleeves and the line round the neck are visible whether the corslet is worn or not, and when the corslet is not represented the garment is seen to be of one piece.¹ Below the waist it has one heavy vertical band and two or more transverse which, as Bonnet points out, cannot be merely decorative, as they are indicated in slight relief. In spite of their wide spacing, they must represent some form of protective strengthening. It is possible that the garment was wadded throughout and that the bands represent double wadding. There is always a band round the waist which may be a separate belt; there are none round the chest, which had the protection of the shield.

The Shardan form of corslet is at present known from only one non-Egyptian monument, the ivory mirror-handle of the Griffin-slayer from Enkomi (Pl. II, 4). This carving belongs to the same Mycenaean group as the draught-box, but the hero differs in all respects from the hunting king. He is beardless; he wears a ribbed corslet of Shardan, or perhaps in this case Pulesati, type with a very distinct belt and a chiton with a broad vertical band and a deep border. The ribbed corslet was therefore apparently known in Cyprus or Syria or both towards the end of the Bronze Age, after which, unlike the scale corslet, it is no more seen anywhere. No Bronze Age scales have so far been discovered in Cyprus.

Cyprus leads us to the Aegean and mainland Greece. Here no vestige of scale or plate has been discovered in any Bronze Age tomb, and we must therefore conclude that no corslet of either type was in use. From the end of the fifteenth century, however, the Achaeans must often have come in contact with corslet-using people in Syria and very possibly in the Aegean area; since Ugarit was an ally of Ramses II, some may even have fought in corslets at the battle of Kadesh, and inhabitants of the Mycenaean settlements at Miletus and elsewhere on the Anatolian coast may have found themselves in conflict with the Shardana and Pulesati. Hence it is not surprising to find that in those rare representations of Achaean warriors which first become available in the latter half of LH III the corslet is regularly worn; to judge by the representations, it is of leather or at any rate non-metallic. This does not apply to Mycenaean wall-paintings, which are products of a very conservative art in which the earlier tradition is maintained; but the Warrior vase and stele (Pls. II and III) and one or two sherds all show some form of body protection which, with a single exception (for which see next page) is of one type. Much the most detailed version is to be found on the Warrior vase.

¹ The only alternative is to suppose that all figures have corslets, but that in some cases the ribbing has been omitted or become obliterated.

The men on the obverse wear a short, loose jerkin reaching to the waist, from which it stands off stiffly. It appears to be laced down both sides, represented, according to a common convention, at back and front. In these particulars the men of the reverse end of the stele agree with those on the obverse of the vase, but the warriors on the reverse exhibit a peculiarity of their own. Across the chest of each figure run two rows of white dots which in every case but one are divided by a narrow white strip and in one case are surmounted by two; each man also has white strips encircling the arm just below the junction with the shoulder. These features in white can hardly represent anything but a strengthening of the corslet by studs and bindings of metal.¹ One man on the obverse (next to the woman) has white spots on his corslet and all alike, with a single exception on the obverse and with none on the reverse, have them in abundance on the skirts of their chitons. There cannot be a doubt that these stand for disks of metal. The one exception is the man second from the right on the obverse, the skirt of whose chiton is outlined and left in reserve. What (if any) is the meaning of this it is impossible to say. All the corslets alike appear to have long sleeves.

It will be noted that in spite of the differences in detail the general resemblance of the Achaian equipment to that of the Shardana and Pulesati is marked. The corslet stops at the waist, and below it the chiton has a metallic strengthening. In the chapter on the helmet it will be shown that the resemblance extends to that later type of Shardan helmet which figures in the Land and Sea Raid and that both Shardan and Achaian forms were probably designed for defence against the slashing sword.

It seems probable that another warrior on a sherd from Mycenae² wears the same type of corslet, for though it does not stand out at the waist, it is distinguished from the chiton skirt below it which has a draught-board pattern. On yet another Mycenaean sherd (Pl. XII, 1)³ a man standing behind a horse wears what is probably a closely similar corslet differently represented. It is laced across the shoulders and vertical stripes run down the chest. The chiton which shows below the horse's belly is in outline, plain and fringeless.

One hint of a different type of corslet in use at Mycenae is given by a sherd found by Tsountas⁴ on which survive the torso and legs of a headless and footless warrior. He wears a dark garment, somewhat stiff, since it projects in front, and shorter than a chiton, just reaching the top of the thighs. As far as length goes it might be a scale corslet, but there is no indication of metal or of the belt which in the Near East is regularly worn with this ancient and standard form. Presumably it is a leather jerkin of an unusual type (Pl. XII, 2).

¹ Traces of white paint which has flaked and does not appear in any reproduction can be seen in several places on the vase and might repay examination.

² F. und L., pl. xxxviii, no. 394.

³ Rodenwaldt, *Der Fries*, p. 24, fig. 14.

⁴ *Eph. Arch.*, 1891, pl. iii, 2.

The chariot sherd from Tiryns (p. 149, fig. 9) is too barbaric in execution to yield much information. There is, however, no doubt that the two men wear hanging down their backs the skins of animals whose tails appear between their legs. Unless the men are *ψαλοί*, this suggests a deterioration in defensive armour, for it is unlikely that a jerkin would be worn as well.

So much for the Bronze Age in Greece. For the whole of the Early Iron Age, i.e. right down to the introduction of hoplite equipment, there is only one piece of direct evidence for the existence of a corslet, and it is of very doubtful value. In a proto-Geometric tholos excavated by the late John Pendlebury in the neighbourhood of Karphi in Crete¹ an object was found which may possibly be a relic of a scale corslet, viz. a collar of bronze disks which were once attached to some perishable material. The collar must once have formed part of a garment, hardly one of peaceful life. Crete, whose connexions with Cyprus were never wholly severed, is a natural place in which to find such a stray from the Near East; and in Cyprus itself the scale corslet was possibly in occasional use, as considerable finds of bronze and iron scales of a somewhat later date at Amathus and Idalion suggest.

Apart from this doubtful exception, not one of the comparatively numerous proto-Geometric and Geometric tombs which have yielded weapons, whether in Crete or on the mainland—those of Kavousi, Vrokastro, the Kerameikos, the Dipylon cemetery, the Geometric graves in the neighbourhood of the Areopagus, the tumuli of Halos—has produced any scrap of metal that it is possible to associate with a corslet. Down to 700 if, as is probable, a corslet was worn, it must have been made of perishable material. Geometric vase-painting can furnish no direct evidence on the subject of the corslet. There is no reason, however, to suppose that it was abandoned, since it required no imported material, whereas the bronze of the plate corslet must have come from abroad. Though the number is inadequate for safe generalization, the wounds inflicted in Geometric battle-scenes support, so far as they go, this conclusion. Wounds in the chest are all but absent, perhaps because they were unlikely to be dealt unless the shield was displaced and the Geometric artist was not equal to portraying the situation. Normally warriors, whether with or without shields, are hit in the head or neck, or have the abdomen or thighs transfixed by a thrown spear or an arrow.² Only on an Attic Geometric krater in New York does the winning party in a sword duel seek his adversary's chest with the point;³ there is no shield and he might hope to penetrate a

¹ *JHS*, lviü (1938), pp. 233-4.

² *SCE.*, vol. iii. At Amathus (Tomb 2) iron scales only, dated to Cyp. Archaic I, which ends in the sixth century, p. 13, no. 57; at Idalion, bronze and iron dated to Cyp. Archaic II which ends c. 475. *Op. cit.*, p. 538, no. 236, and p. 599; pl. clxxii, and p. 598, fig. 249.

³ *P. et C.* vii, p. 174, fig. 57, and p. 178, fig. 61. The first example exhibits a projection below the point of entry of the arrow which may represent the end of a short sword. Cf. also p. 157, fig. 13, *supra*.

⁴ *Bull. Met. Mus. of Art, New York*, xxix (1934), pp. 169 ff., figs. 1 and 2.

leather jerkin. 'Nestor',¹ however, on a Geometric psykter from the Athenian Agora seeks a point just below the waist which the corslet of the Warrior vase would have left exposed, and the point of entry of the abdominal wounds is but little lower. If there is anything in the data of the battle-scenes, the Geometric corslet was, like that of the Warrior vase, a short one. The stab above the collar-bone characteristic of LH I duels does not appear, presumably because the average sword was too long for it.

Chest wounds without any mention of a corslet in the *Iliad* are fairly numerous, partly perhaps because the poet was not called upon to represent them graphically, but also perhaps because their infliction was a matter of exceptional luck, strength, or skill of which heroes have more than the ordinary man's share. The matter-of-fact style of the Geometric artist does not single out individuals for glorification, but gives the general average of the field of battle. To inflict a chest wound the Homeric hero must catch his opponent with his shield out of position, or get round it or crash through it, after which the resistance of the corslet is of no great account. Of the blows or wounds in question only two can be claimed as survivals of the body-shield tradition, viz., those described in *Ε* 402-6 and *Ο* 645-50, which have already been discussed in the chapter on the shield.

Of the remaining dozen or so² the greater number belong not merely to the era of the round shield, but to the Iron Age, for they are dealt by the throwing-spear, which, so far as our evidence serves, was unknown in the Aegean warfare of the Bronze Age. It is evident that the shield was the principal defence; twice in a repeated line (*ΙΙ* 312 and 400) we are told that the victim exposed himself, in three cases (*Θ* 313, *Α* 108, 144) he is a charioteer and therefore shieldless, once he is occupied with the reins (144). In the other cases the audience would no doubt assume that the shield was not in position, and similarly in the case of wounds in the back,³ when the fugitive might well have failed to get his shield round in time.⁴ Shoulder wounds are generally in the right shoulder, which the shield could not as a rule protect. It is of course quite possible that some Greeks in the Geometric age fought without corslets, as does the ordinary Assyrian soldier from his first appearance on monuments of the ninth century onwards, and also the marching men portrayed on the reliefs of Carchemish. To account, however, for the frequency in epic poetry of the noun and verb it seems necessary to assume that the article was in fairly general use in Ionian, as it had been in Achaian, communities. In view of the

¹ According to Hampe's identification. See *Frühe griechische Sagenbilder*, p. 88, fig. 31; *Hesperia*, Supplement II, p. 70, fig. 44. 'Nestor' is evidently getting his point past the side of the shield. These two examples of the slashing sword used with the point are of great interest.

² *Α* 480; *Ε* 79, 145; *Θ* 303, 313; *Α* 108, 144, 321; *Ν* 186; *Ο* 420, 523; *Π* 312, 400, 597; *Ρ* 309. This list adds to the examples collected by Reichel and Robert. It is probably fairly complete, but does not claim to be exhaustive.

³ e.g. *Ε* 40-1 = *Θ* 258-9 = *Α* 447-8, *Ε* 56, *Υ* 422, 488-9.

⁴ e.g. *Ε* 46, *Α* 421, *Ο* 541, *Π* 289, 323, 343.

number and the impartial distribution throughout the poem of the various forms of the verb *θωρήσασθαι* as well as its perfectly apt use throughout, it seems extremely unlikely that they are all examples of interpolation, all the more so as *θωρήσασθαι* is not a metrical equivalent for *κορύσσειν*, the other normal though less frequent verb used to denote arming,¹ and simple substitution was consequently impossible. Except in the figurative sense of 'fortify by drink', the verb is confined to epic and parody. The noun, on the other hand, runs through ancient Greek literature from beginning to end, in poetry and prose; it is of unknown origin, and in these respects it resembles *ἀνις* and *ξίφος*. These facts point to a very early entry into the Greek language, promptly followed by the creation of the verb, the natural occasion being the adoption of the corslet which we have examined on LH III monuments. So far as our evidence serves, this falls between the date of the King's Tomb at Dendra in the first half of the fourteenth century and that of the Warrior vase, in the second half of the thirteenth. It agrees with this antiquity that the Greeks had no tradition of the invention of the corslet: its ascription to 'Thorax quidam rex'² is a confession of ignorance. It is surprising that it is nowhere credited to the Carians, who in lists of *εὐρήματα* show a tendency to become residuary legatees of unassigned military inventions.³ Moreover, if the Bronze Age corslet disappeared from actual life, how did it come about that the name, preserved in epic poetry alone, was universally applied in ordinary speech to the revolutionary and epoch-making plate-corslet?

There are one or two occasions in the *Iliad* when the presence of a corslet seems to be allowed for though it is not mentioned. Achilles, having Asteropaios completely at his mercy and able to select his spot, *θυμὸν ἀπηύρα, γαστέρα γάρ μιν τύψε παρ' ὀμφαλόν*,⁴ presumably because it was exposed; the place was one which a short corslet would not cover. A later rhapsode noticed the significance of the wound and introduced as a prize at the Games the corslet of Asteropaios, of bronze with a *χεῦμα* of tin, a conception impossible before the seventh century.⁵ Similarly Meriones hits Adamas with a spear-cast *αἰδοίων τε μισσηγὸ καὶ ὀμφαλοῦ*.⁶ A Cretan, Meriones is a good marksman; shortly after (l. 650) he sends after a retreating foe an arrow which after entering the right buttock traverses the bladder. Here an earlier exploit of the same hero with the spear (*E* 66-7) is repeated almost verbally. *A* 338-9 affords another instance.

¹ It is virtually confined to the middle. *πάλεμον κορύσσειν* (*B* 273) does not mean 'telling the host to arm', a sense which does not occur, but 'directing operations'.

² Servius ad *Aen.* ix. 593.

³ ἀρετὴ ὅπλα Chrestomathy, *Ox. Pap.* x, p. 106, l. 29; graves, Pliny, *N.H.* vii. 200.

⁴ *Φ* 179-80.

⁵ *Ψ* 510-1.

⁶ *N* 567-8. The episode is curiously telescoped, for Adamas was fleeing; he must have turned sharp on his pursuer and failed to get his shield into position in time. This, the only possible explanation, is given by Scholl. B and T, as an alternative to taking *ἀπώοντα* = *προχωροῦντα*. It is strange that none of the leading modern commentators—Leuf, Ameis und Henze, van Leeuwen—notices the difficulty.

It is of course true that, corslet or no corslet, the pursuer would aim low if the shield were slung behind.

What lent force to Reichel's attack on the corslet was the fact that almost every reference in the *Iliad* to a specific corslet states or implies that it is of metal—i.e. that it is the hoplite plate-corslet. Further, in two passages a line which introduces the corslet deprives the context of sense, which is restored by the simple excision of the always inorganic line, καὶ διὰ θώρηκος πολυδαίδαλου ἡρήρειστο, twice (*Γ* 358 and *Η* 252) followed by . . . δ' ἐκλίνθη καὶ ἀλευάτο κῆρα μέλαιναν. As has often been pointed out, a man whose corslet has been pierced by a spear cannot then save himself by swerving. In the case of *Γ* 358 and *Η* 252, excision of the line is all that is necessary. *Δ* 136 contributes only one item to the chaos of the Wounding of Menelaos, which is not reduced to order by its removal; the line, however, is certainly interpolated, since the corslet is not mentioned in the passage which begins at 185, where the other pieces of armour are enumerated.

There is nothing patently absurd about the wounding of Odysseus in *Δ*; it is even possible that 436 is original and was borrowed for insertion in the other passages. The corslet, however, is not mentioned when the spear is withdrawn (457), the epithet πολυδαίδαλος seems too honorific for a leather jerkin, and Odysseus is nowhere else credited with a corslet. Moreover, in other cases where the shield is pierced, the corslet resists (*Ε* 282, *Ψ* 819); these are probably original and show the leather jerkin's real though supplementary rôle. When the spear of Idomeneus, however, cast at Hector (*Π* 606) hits him straight on the corslet and breaks at the socket, we have almost certainly another interpolation; the corslet which produced such a result must have been of metal.

All passages in which γύαλα are ascribed to corslets must be interpolated, for there is no reason to doubt the ancient explanation of the term as denoting the plates, front and back, of the hoplite corslet of the seventh and sixth centuries. This, though it continued to figure in art in heroic scenes, was superseded in real life in the fifth century; hence the need for the gloss.¹ This disposes at once of the corslet of Diomedes (*Ε* 99-100) whose θώρηκος γύαλον comes awkwardly when the position of the wound has just been much more precisely defined as κατὰ δεξιῶν ὤμων, and the rest of the narrative confirms the conclusion; Pandaros indeed alludes to it (189), but when the arrow is removed (112-13) it is ignored. Sthenelos pulled it out without encountering any resistance from the barbs and the blood 'shot out' (ἀνηκόντιζε, αἷα παρὰ λεγόμενον) through the chiton. This appears to be a description, unique in Homer, of the severing of an artery,² presumably the axillary; without the divine aid which he receives Diomedes would have

¹ Schol. A, ad loc. Polygnotus introduced it, apparently as a heroic property, into his painting of the siege of Troy at Delphi (Paus. x. 26. 5).

² See O. Körner, *Die ärztlichen Kenntnisse in Ilias und Odyssee*, p. 46.

bled to death in a few minutes. Blood, however, could not issue in a spear-like jet through a metal corslet, nor for that matter through a chiton wadded or otherwise strengthened; what *στρεπτός* means is not known. 113 therefore must be an interpolation. Again, when after a long spell of fighting Diomedes wishes to ease his injured shoulder (794 ff.), he has only to lift the telamon of his shield to get at the wound.

In two identical passages (*N* 507-8, *P* 314-15) it would seem that in the original version the victim was wounded below the level of the leather jerkin (cf. *A* 424-5); the half-line *ῥῆξε δὲ θώρηκος γυῖον* has been inserted, banishing some metrical equivalent and possibly involving further alteration of the text.¹ In the episode of Megeles (*O* 529 ff.) the removal of 530-4² restores order; the shield had been pierced and the stout jerkin resisted the impeded spear. It would certainly not be thought worthy of the pedigree given in 531-4, the closest parallel to which is that given in the account of the boar's tusk helmet in *K*, a post-Odyssean book. In the only remaining case of a *γυῖον* (*N* 585 ff.) a greater sacrifice must be made. That the whole episode of Helenos as an archer is probably interpolated will be argued in the chapter on the bow. It is true that 587 can be removed without injury to the context, but is hardly to be credited that an arrow from a composite bow shot at comparatively short range would bounce off a leather corslet like a bean off a winnowing shovel, and the *ἀπαξ λεγόμενα* of that delightful simile are too numerous to be accepted.

In two cases it seems probable that a leather has been converted into a bronze corslet by the addition of a single line (*N* 372 and 398).

There is a curious passage in *A* (368 ff.) where Diomedes is disturbed in the act of stripping a fallen foe of his *θώρηκα παναίολον*. The line containing the corslet is linked with another line and a half, and the passage is essential to the narrative as it stands; either it is original or something has been displaced to make way for it. It can be defended as original only if we regard the corslet as a scale corslet such as many of the poet's Greek contemporaries must have known and some may have worn; it must always have carried an Oriental flavour and may have earned the Trojans and Lykians the epithet of *θωρηκτάων*.³ The epithet *αἰολοθώρηξ*, however, is

¹ It will be noted that the formula *ὁ δ' ἐν κοίτῃσι πεσὼν ἔλε γαῖαν ἀποστῆναι* occurs in two passages (*N* 520, *E* 457) where the wound is in the shoulder and there is no mention of the corslet. The rare word *ἀποστῆναι* which occurs only in the *Iliad* (5 times) and only in this formula which by varying the verb with which the line begins can be applied to any case of instant death on the field. Apparently it was obsolescent; it first reappears in the Alexandrian poets. On *P* 315 Schol. B has some apt remarks.

² The exceptional use of *ἀερόμενα* with the meaning 'composed of' has a parallel in *II* 212.

³ Lykians, *M* 317; Trojans, *O* 689, 739, *Φ* 277. The epithet is once (*Φ* 429) applied to the Argēioi, but in the dative case, a unique deviation from the general rule. It is true that the scale corslet must have become known to the Mycenaeans from the date of their settlement at Ugarit, and all the Greeks of the east Mediterranean presumably made the acquaintance of the Shardin type of corslet in the thirteenth and early twelfth century, but it is most improbable that this passage has been handed down from so early a date.

allotted once to a Greek as well as once to a Trojan (*II* 173, *A* 489). It is much more probable that in Diomede's adventure the corslet has been interpolated with some sacrifice of the original text. Nowhere else in the *Iliad* does a hero strip a fallen foe of his corslet, though in a dubious passage Hector expresses the aspiration (*Θ* 194-5). Idomeneus (*N* 265) says that he has plenty thus acquired in his tent, but they betray themselves as intrusive by their epithet *λαμπρόν γανόωντες* and the line might well go. It is quite otherwise with the episode in *A*. Apart from the corslet there is nothing abnormal in it; battle-field plundering, quite impossible for the hoplite phalanx, is normal in Homer and must often in real life have led to disaster. Shield, spear, sword, and even helmet could, however, be snatched with comparative ease, especially if *ἑταῖροι* were there to assist, but taking off a corslet was a different matter and in the case of a leather one not worth while. While Diomede is thus occupied, Paris, squatting unseen behind the tombstone of Ilos, shoots an arrow which pierces his foot, and he is forced to quit the field in his chariot, leaving Odysseus unsupported amid a general flight of the Greeks. The texture of the narrative is close as it approaches the Achaeans' darkest hour; nor would anyone willingly sacrifice the interchange between Diomede and Paris. The only offending lines are 373-4, and we must suppose them to have displaced an original which we have no means of restoring; there is no formula of spoliation which fits on to 375.

With regard to the formal arming scenes, it is impossible to say whether the corslet as the second item was part of the original formula or not. The leather leggings and corslet of the Bronze Age may well have been thought worth a mention; equally it would have been a simple matter to introduce their metal equivalents in the period of hoplite interpolations. No hint is given of the nature of the corslet which Paris, summoned to the duel from his rôle as archer, has to borrow from his brother (*I* 332) nor of his own which, in a line better discarded, he is found cleaning in *Z* 322.

The corslet of Achilles assumed by Patroklos (*II* 133-4) is described in 134 as *ποικίλον, ἀσπερόδεντον*, which certainly indicates metal. Assuming 133 to be original, 134 must go and so must 804, in which Apollo removes what must surely have been assumed to be a metal corslet; nothing less would have deserved his notice. The replacement which Thetis orders in a single word (*Σ* 469) must have been of metal since it is ordered of a smith, but as the smith was divine and could not sink to the level of a *σκυτοτόμος*, the implication of metal may (as in the case of the greaves) be only the enhancement permissible in a fairy-tale. The manufacture of the corslet, now plainly implied to be of metal, is dispatched in a single line (610); and in the ensuing arming scene only the stock line (*T* 371) is employed.

Alone among the arming scenes that of Agamemnon presents points of interest, almost every piece of equipment having some abnormal feature.

We have seen that the description of the shield has suffered the interpolation of the Gorgoneion. There is nothing to date the unique corslet so precisely, but the mention of Kinyres as king of Cyprus suggests that its entry into the epic tradition was at least later than the end of the Bronze Age. Till then Cyprus was Achaian, as the poet of the *Odyssey* remembered;¹ Kinyres belongs to the succeeding period, when influences from the mainland opposite were paramount in the island, and immigration from it had certainly begun.

It is evident that in the corslet a real article is described, though not necessarily one known *in corpore* to the poet. The *οἰμοί* were identified by Evans with the ribs of the Shardan corslet; but that disappeared with the Bronze Age and Agamemnon's equipment belongs in the main to the Age of Iron (two spears and omphalos shield). There is something to be said for the scale corslet as we have seen it in the wall-paintings of the Royal Tomb of Ramses III, whose transverse bands might aptly be described as *οἰμοί* and whose variegated colours suggest a combination of different materials; yellow and blue at least are there to represent gold and cyanus. Such *chefs-d'œuvre* may well have appeared from time to time in the long history of the scale corslet and may have been celebrated in the epic tradition which presumably was carried to Cyprus and may have persisted there. For the snakes of cyanus no known form of corslet offers any parallel. It is true that in the subsequent attack on Agamemnon (*A* 234-7) he is found to be wearing a short corslet which stops at the waist and is supplemented by a belt, an article for which our evidence does not go back beyond the latter part of the eighth century, though the article itself may.² There is, however, no need to assume that the arming-scene with all its peculiarities is from the same hand as the ensuing narrative.

Corslets occur in the plural in four cases, all of which bear marks of lateness. In the *Catalogue* (*B* 543-4) the Abantes are certainly the hoplites admired by Archilochus: αἰχμηταὶ μεμαῶτες ὀρεκτῆσιν μελήσιν | θῶρηκας ῥήξιν δῆμων ὀμφί στήθεσσι. The quality of the second hexameter may be noted in passing. That the bronze corslet could be pierced by an exceptionally heavy spear-thrust there is no reason to doubt; several of the bronze greaves and shield blazons found by the Germans in their last excavations at Olympia show fractures of this sort.³

In *N* the corslets among the spoils of Idomeneus have already been noted. In the same book metal corslets recur in a passage independently suspect (339-43) as apparently describing phalanx formation, while the θῶρηκες κραταιότατοι of *T* 361 repeat the error of *N* 265 in that they are combined with omphalos shields. Here as in *N* the line can go without disturbance.

The adjective χαλκοχίτωνες presents a problem. As an epithet of the Achaeans, its principal function, it is certainly traditional. The two words

¹ p. 443.² See *infra*, p. 246.³ *Jb.* lii (1937), Olympiabbericht, p. 52.

invariably occupy the end of the line and with a single exception (*K* 287) are in the genitive case. The twenty-four examples of this combination include several formulae, of which one forms a complete line *Τρώων ἱπποδάμων καὶ Ἀχαιῶν χαλκοχιτώνων* (*Γ* 127, 131, 251, *Θ* 71). The genitive depends four times on *νήας* (*A* 371, *B* 47, 187, *K* 136), once on *νηυσίν* (*Ω* 225), and three times on *λαόν* (*B* 163, *A* 199, *O* 56). This considerable fixity of usage suggests a long previous tradition which in the *Iliad* is just beginning to disintegrate. In eight examples—seven if we omit the dubious *N* 255, questioned in antiquity (Schol. *T.* ad loc.) and lacking in an appreciable number of papyri and manuscripts—the epithet is attached to a new set of names—twice to the Argeioi (*A* 285, *M* 354), twice to the Epeioi (*A* 537, and in the nominative case, *A* 694), once to the Boeotians (*O* 330), and in a repeated line twice to the Trojans (*E* 180, *P* 485), despite the fact that elsewhere it is the distinctive description of the Achaeans. In the doubtful line it is applied to the Cretans. *χαλκοχιτώνων* inevitably remains the last word, but the new gentile names generally find an earlier place in the line. It will be noted that all occur in passages which definitely belong to the *Iliad* in its final form or may in some cases be additions to it.

If in its predominant rôle the adjective is traditional, it must describe the Achaeans of the Bronze Age; their importance did not survive it, and it is improbable that in the Dark Age anyone was at the trouble of inventing new martial epithets for them. The scale corslet, which might fairly be described as a bronze shirt, was known to them in their great days, since it was current at Ugarit, but there is no evidence that it was used by the Greeks of the Aegaeon area, nor even, surprisingly enough, by those of Cyprus; not a single scale has been found in any Bronze Age tomb in the island. One chiton, however, is known to us which meets the case—that depicted on the Warrior vase with its armouring of metal disks. If the interpretation given above (p. 200) of the bands on the chitons of the Shardana and Pulesati is correct, the practice of strengthening so much of the chiton as was not covered by the corslet was common at that date. The form worn in the Peloponnese may fairly claim to have given rise to the epithet *χαλκοχιτώνες*.

The unique *χιτών χάλκεος* of *N* 439-40 is a puzzle. It is worn by Alkathoos, a Trojan of note, whom it had hitherto protected; paralysed, however, by Poseidon, he allowed Idomeneus to deal him a blow on the chest which pierced his heart. The only corslet which resembles a chiton is the scale corslet, appropriate enough for a Trojan (cf. *θωρηκτής*, *supra*). Alternatively it is possible to eliminate 440-1 without injury to the sense. *ῥῆξεν* is possibly over-emphatic for the tearing of an ordinary chiton; but the point is that Poseidon prevented him from getting his shield into position.

Certain expressions remain which, though they do not mention a metal corslet, can only be fairly interpreted as implying one. Two stock phrases

(ἐδύσετο νύροπα χαλκόν, ἔσαντο περὶ χροῖ νύροπα χαλκόν) look like simple adaptations of epic usage;¹ the former could be replaced by the familiar κορύσσετο νύροπι χαλκῶ, and in the latter νύροπα χαλκόν might become τεύχεα καλά. περὶ χροῖ does not necessarily imply a corslet; cf. *N* 640. In the isolated χαλκόν ζώννυσθαι (*Ψ* 130) ὄπλα might be substituted; but ζώννυσθαι in the sense of girding on armour is itself rare; the only other example is in *A* 15. *Σ* 522 might become Ἴζον βοέησ' εἰλυμένοι ὤμους; but it is possible that the whole episode is late. The motif of the cattle-lifting raid occurs in the *Cypria* as reported by Proclus; and the description of the Shield is as vulnerable to interpolation as the *Catalogue* itself. In the account of Hector as 'covered with bronze all over' (*N* 191-2) we have an unmistakable description of the hoplite panoply; but the interpolation is limited to these two lines, the rest of the episode being described in traditional terms: Imbrios is hit under the ear, where a Corinthian helmet would have protected him (177); his armour is not of metal, but merely ποικίλα χαλκῶ (181); Hector throws his spear (183) and pierces Amphimachos to the heart with no mention of a corslet. ἐθωρήσαντο δὲ χαλκῶ (*ψ* 369) may well be original; the *Odyssey* is certainly later than the *Iliad* and its composition may fall in the early years of the seventh century, quite apart from the view of Aristophanes and Aristarchus that it ended with *ψ* 296.

It is evident that after the adoption of the hoplite panoply there was an effort, probably systematic, to introduce it and especially the most conspicuous element in it, the plate corslet, into the *Iliad*. Nothing could be done with hoplite tactics, which were incompatible with Homeric warfare in every detail; the forward rushes and the retreats of individual πρόμαχοι, the rapid movement by chariot from one part of the field to another, the use of the throwing-spear, the exchange of insults with the selected foe, the stripping of the slain. The bronze thorex, however, was admitted without much maladjustment, thanks to the presence of an inferior predecessor. Without the knowledge of its date which archaeological evidence supplies little could be confidently eliminated but the corslet of Diomedes in *E* and the betraying καὶ διὰ θώρηκος πολυδαιδάλου ἡγήρειστο.

Note

The epithet λυοθώρηξ occurs twice only in Homer, both times in the *Catalogue* (*B* 529 and 830), describing in the one case a Greek hero (the Lesser Aias) and in the other a Trojan (Amphios) the son of a seer, subsequently slain by Diomedes (*A* 328 ff., where 329-32 = *B* 831-4). λυοθώρηκες is applied to the Argives in the oracle (*Anth. Pal.* xiv. 73) which declared them to be the best fighting-men of their day, and whose date must therefore have fallen in the period of Argive predominance in the seventh century. The linen corslet seems to have been an Egyptian specialty. Amasis (570-526) dedicated one of extremely elaborate

¹ νύροψ; a word of unknown origin and confined to the fifth place, had probably long been at home in Greek heroic poetry.

workmanship in the temple of Athana Lindia in Rhodes (Herod. ii. 182 and Pliny, *N.H.* xix. 12) and sent to Sparta a precisely similar specimen, which never reached its destination (Herod. iii. 47). While Assyria held Egypt, contacts with Greece are seldom discernible; but after the victory of Psammetichus in 663 many an enriched mercenary might bring home such an appropriate rarity as a linen corslet, and the reputation of the foreign curio would spread. The word in Homer can hardly be other than a seventh-century interpolation. What guided the interpolator in his choice of heroes we cannot even guess; but we may note another interpolation concerning the Lesser Aias, viz. the passage which describes his corps of archers (*N* 712 ff.). The account conflicts, first, with the Homeric use of archers, who are either first-class heroes, mostly Trojan, armed with the Asiatic bow, or an unnamed, unorganized, and apparently ineffectual mass composed of *λαιοί*, and secondly with the description of the same troops in *Δ* (280 ff.). The interpolation probably reflects experiments in organizing the *φαιοί* which would necessarily follow on the adoption of the hoplite system.

As for the Argives, it is possible that they too experimented, and sought in linen an alternative to the plate corslet which would probably be lighter (unless it were of quite extraordinary thickness) and at least would not attain the temperature which bronze must have reached under the summer sun of Greece.¹ Even if only a special corps was equipped in this way, its conspicuous quality would suffice to attract the epithet.²

4. THE HELMET

Neither the material remains nor the poems afford much evidence by which to determine the nature of the Homeric helmet, or rather helmets, for more types than one figure in both these sources. In one respect it fares worse than the shield, inasmuch as the representations in art are for the most part so small as to be useless or at best disputable in the investigation of detail. On the other hand, we have from a grave at Ialysos a bronze cheek-piece from an actual helmet (Pl. XIII, 1),³ shaped like the partially preserved representation of one on the frieze of the megaron at Mycenae,⁴ and a complete bronze helmet (Pls. XIII, 2, XIV) of a new type from a Mycenaean tomb at Dendra,⁵ a comparatively recent find of first-class importance. None, however, survives from the proto-Geometric or Geometric age, and in the poems the names and epithets of the helmet are mostly unenlightening or obscure.

¹ Before the end of the sixth century the plate corslet was giving way to one of leather with extensive bronze plating (see a vase by Amasis, *Muz.* iii. 218 and 219).

² The article apparently continued to be held in esteem, for Aeneas Tacticus (xxix. 4) tells how *θίπαικες λίνοι* were once smuggled, with weapons and other armour, into a city unfortunately not named.

³ The original, in the British Museum, was first cited by Kukahn, *Der griechische Helm*, p. 6.

⁴ Rodenwaldt, *Fries*, Beil. iii. 11.

⁵ Persson, *New Tombs at Dendra near Midea*, pp. 120 ff., pl. 1. The discovery was announced in a summary report of the Swedish excavations and repeated in the principal archaeological periodicals, e.g. *JHS*, lix (1939), p. 194. The helmet was published with illustrations and a full discussion by Professor Persson in his book.

The oldest type traceable on the Greek mainland is the boar's tusk helmet whose description in *K* is the best account of a Mycenaean object in Homer. Though he only reached his conclusion in the second edition of his book, Reichel¹ has the credit of connecting this passage with certain plates of boars' tusks (Fig. 18) perforated for attachment to some kind of backing which are characteristic of Bronze Age Greece. These plates have occurred on a large number of sites distributed over the mainland from Boeotia to Messenia,² but have so far only once been found outside it—in Crete, in a LM III grave near Knossos;³ their date being thus later than

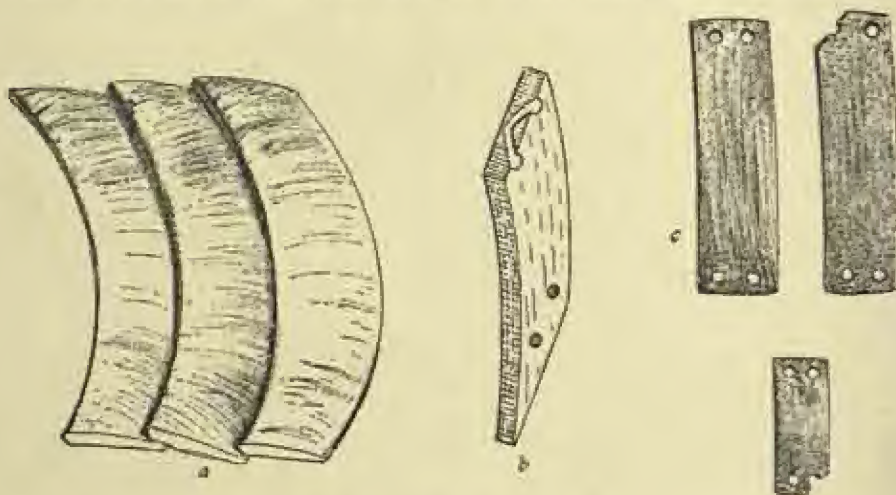


FIG. 18

the destruction of the Palace. For long they were known only in LH contexts, but in recent years specimens of MH date have been found at Eutresis and Eleusis.⁴

With the evidence of a couple of ivory heads (Fig. 19)⁵ whose head-gear had previously defied interpretation Reichel was able to complete his reconstruction, which commanded immediate and general assent and has been accepted ever since, and the passage in *K* (261-5) became for the first

¹ *HW*.², pp. 102 ff. Unfortunately his brilliant exposition came too late for the second edition of Leaf's *Iliad*; only in the second volume (1907) is there a brief allusion to it (App. M. 8, p. 629).

² The list of sites at present is as follows: In the Peloponnese, Mycenae, Prosymna, Dendra, Asine, Karkovatos (in Triphyly), and Malthi, which is almost certainly the ancient Dorion. In Attica, Eleusis (Middle Helladic), Menidhi, and Spata (Late Helladic). In Boeotia, Eutresis (Middle Helladic). None was found at Dhimni, though the name was included in his list by Reichel, *HW*.², p. 103, n. 1.

³ A. Evans, *The Prehistoric Tombs of Knossos*, pp. 66-7.

⁴ H. Goldman, *Excavations at Eutresis*, pp. 52 ff. and 220; Mylonas, *Προϊστορικὴ Ἐλευσίς*, pp. 55 and 145, fig. 119.

⁵ (a) *Eph. Arch.*, 1888, pp. 146, 165, pl. viii, 12; also Rodenwaldt, *op. cit.*, p. 61, fig. 30; Reichel, *HW*.², p. 103, fig. 38; Bossert¹, no. 57. From Mycenae. (b) *BCH.*, 1878, pl. xviii, 2;

time fully intelligible. It may be translated as follows: 'He set on his head a helmet made of ox-hide; inside, it was made of thongs tightly strained and on the outside the tusks of a white-toothed boar, thick-set, ran in contrary directions, well and skilfully set, and in between a cap of felt was fitted.'

The sense given to ἐντέτατο is fully borne out by its use in *E* 727-8, where it is said that the body of Hera's chariot χρυσέοισι καὶ ἀργυρέοισιν ἱμάσιν ἐντέταται; i.e. it was made of such plaited strips as form, in leather, the floor of a chariot found at Egyptian Thebes.¹ The intransitive sense given to ἔχον is fully justified when the verb is accompanied by an adverb of direction.² Despite learned attempts to shift it to the innermost posi-



FIG. 19

tion, the situation of the felt cap is fixed by the words ἐντοσθεν, ἔκτοσθε, μέσση and by common sense. The tusk of the boar splits very easily; it was essential that the plates should be attached to a soft, smooth, and pliant backing. The practical application of the method by Professor Wace is shown in *Ch.T.*, pl. xxxviii, where the precise force of ἐνθα καὶ ἐνθα is also illustrated.³ Only plates from the convex outer face of each tusk were used, an equal number from each, with the curve (the convex side being necessarily kept on the outside) facing in opposite directions. Hence the slightly crescent-shaped plates face right and left in alternate rows.

The boar's tusk helmet does not survive the Third Late Helladic period; it did not even last till its end. There is no single sub-Mycenaean example,

also Reichel, loc. cit., fig. 39. From Sparta (Attika). An ivory box from Enkomi furnishes a head in relief of the same type (*Exc. in Cyp.* pl. ii, 1340).

¹ *v. infra*, Pl. XXV, 1.

² Cf. + 38 κίονες ἐπὶ τοῖς ἔχοντες.

³ Cf. *op. cit.*, pp. 212-14. We are promised in the near future the reconstruction of a helmet from a large number of plates found by Professor Persson; unfortunately the work could not be undertaken in time for the publication of his book.

and no recorded instance of occurrence with LH material of the latest type. This is natural enough, for the final stage of LH III was a period of impoverishment and degeneration in which neither the thirty or forty pairs of tusks required for such a helmet, even if it had only two rows of plates,¹ nor the skill necessary to produce it were likely to be forthcoming. It is quite certain that no poet of the eighth century or later can have seen an example; his knowledge of it can be derived from nothing but poetic tradition. The nature of that tradition can only be conjectured, but two points of interest emerge from the passage in *K*. The first is the picturesque detail conveyed in *ἀντιόφῃας* which describes the method of burglary appropriate to a mud-brick house and familiar in Indian villages. Mud-brick walls on a stone foundation or pedestal of several courses are characteristic alike of Mycenaean palaces and the earliest Hellenic temples, presumably therefore also of the Geometric house. *ἀντιόφῃας* therefore provides no criterion of date, but does suggest a compressed version of a detailed narrative. The second point arises from the adventures of the helmet. The Cretan origin of Meriones is glanced at, as it is more than once in the *Iliad*, here in the loan to Odysseus of his bow, presumably the one with which he afterwards wins the archery contest at the funeral games of Patroklos. The helmet, however, is not Cretan; stolen out of Boeotia by Autolykus,² it was given by him to Amphidamas of Cythera, who lived apparently in the island port of Skandeia, and by him again to his guest-friend Molos, father of Meriones. Thus the foreign curio came to Crete; evidently it was a thing of price, and by the time that Meriones lent it to Odysseus, it must have had something like the dignity of an heirloom. It travelled to Crete as far as possible by land, the sea-crossings reduced to a minimum. So trade travelled in the Bronze Age, for Cythera is one of the not very numerous places belonging to the Greek mainland where genuine Cretan pottery has been found.

In later days many good stories were told of Autolykus. Possibly in the Bronze Age he was already a character; he appears in one of the very few parts of the *Odyssey* (τ 394 ff.) that can lay plausible claim to a Bronze Age origin. The poet of *K* may have drawn on a traditional tale of his adventures.

Turning to the archaeological history of the boar's tusk helmet, we find that, popular as it was, there is no reason to believe that it was the sole form current on the mainland. At Mycenae plates were found in only two of the six Shaft-graves (IV and in small quantity V),³ though they were more frequent in the chamber-tombs excavated by Tsountas (nos. 31, 69, 75) and later by Wace (*Ch.T.* 515, 516, 518). Asine and Prosymna have

¹ See Karo, *Schachtel*, pp. 218-19. Reichel's estimate of 70 to 80 pairs would suit the five rows of the head on the ivory box-lid. The cases in which a number of plates sufficient or approximately sufficient for the complete plating of a helmet have been found are few.

² *K* 266.

³ Also in the grave under the Granary (*BSA*, xxv, p. 56, fig. 14) and at two points outside the Shaft-graves (Reichel, p. 103, n. 1).

also yielded their quota, but it is plain that the helmet was by no means universal. Whether in LH I and II other helmets were merely of leather or were reinforced with metal cannot be decided. Karo believes that bronze disks perforated for attachment which were also found in IV¹ were used in this way, holding that such disks can be discerned on the helmet of the victorious combatant in the Battle of the Glen (Fig. 2, p. 140, *supra*). Whether this be so or not, the absence of similar material from the other Shaft-graves suggests that leather helmets were the rule. Representations from the Shaft-graves which can be confidently identified with the boar's tusk helmet are fairly numerous, but the most illuminating example is the ivory head in relief already cited (Fig. 19*a*),² which forms part of a box-lid, from a somewhat later interment in a Mycenaean chamber-tomb. In this case the helmet consists of a conical cap divided into five horizontal bands of curved plates which face right and left in alternate rows and terminating in a flat circular projection adapted to hold a plume for which there was no accommodation on the lid. It is true that the helmet sometimes lacks a plume, but in that case it terminates in a spherical knob. The warrior's hair appears in a row of curls on his forehead. Below the cap proper comes a row of plates running round the back of the head, and from this start a broad chin-strap which apparently passes in front of the ear, leaving it exposed, and widens out below, and a neck-guard formed of two rows of plates. These features reappear on a head of inferior workmanship from Spata (Fig. 19*b*), on which the hair and the half-circle of plates are so conventionalized as to form a uniform band which the artist probably regarded as part of the helmet; the chin-strap passes behind the ear leaving the face completely exposed. The example from Enkomi³ forms part of a fragmentary relief on the wall of a pyxis and in style is much nearer to the Mycenaean head. Though the terminal knob or crest-holder and the chin are missing, parts of four rows of plates and the row of curls on the forehead are preserved. A tusk-plated strap passes in front of the ear and widens to form either a very broad chin-strap or possibly a narrow cheek-piece; the part where the neck-guard probably appeared is missing.

On the fragments of a silver vase from Shaft-grave IV⁴ parts of a battle-scene are preserved in which unmistakable representations of the boar's tusk helmet occur (Pl. XV, 1). All are unfortunately incomplete and furnish no information about chin-strap, neck-guard, or cheek-pieces; several crests, however, are wholly or partially preserved. In three cases a tooth-brush

¹ *Schachtgr.*, nos. 541-9, pl. lxx. Karo also adduces the white disks on the helmets of the Warrior vase, but so much of this armature appears to be new and intrusive that none of it can be safely used for the interpretation of unexplained features of the earlier type.

² *Eph. Arch.*, 1888, pl. viii, 12; Rodenwaldt, *Fries*, p. 61, fig. 30; *Schachtgr.*, p. 218, fig. 94, with an excellent exposition.

³ *Exc. in Cyprus*, pl. ii, 1340. To this example found outside mainland Greece must be added the helmet of the warrior on the remarkable ivory plaque found on Delos. See p. 153, n. 1, *supra*.

⁴ *Schachtgr.*, pl. cxxxi g, h, p; cf. f.

crest fits into a curved holder which in one case can be seen to rise from the top of the helmet; the whole somewhat resembles a corrugated horn, but the holder is unmistakably distinguished from the crest. The very similar double crest of a boar's tusk helmet on a gem from Vapheio¹ (Fig. 20) is generally taken to be a pair of ram's horns, but seems rather to be a pair of tooth-brush crests in holders. Whether this helmet is represented full-face or in profile is uncertain, but a tooth-brush crest inserted into the cap of a boar's tusk helmet on the silver vase² is presumably in profile and should therefore run fore and aft. It is a curious fact that this helmet closely resembles the Villanovan helmet found in Iron Age tombs in Etruria, sometimes in bronze, sometimes imitated in pottery, covering the mouths of ossuaries.³

The boar's tusk helmet figures thrice as the design of a seal: on the Vapheio gem already mentioned, on a gem from a chamber-tomb at Mycenae (Pl. XV, 2),⁴ and on a sealing from Hagia Triadha near Phaistos (Fig. 21).⁵ The simplest in appearance is the Mycenaean specimen, which consists of three plated bands and ends above in a knob. Over this a striated crest forms a complete arch, touching the helmet at both ends and tapering from left to right; though the holder is omitted, it can hardly be anything but the stilted tooth-brush crest which we have already seen on the silver vase. Below the cap are three projections which Professor Wace takes to be the cheek-pieces and neck-guard; though they are disproportionately small, their number favours this interpretation. On the sealing from Hagia Triadha there are also three projections, each double; the cap has only two bands with a very summary indication of plates which lack the characteristic curve. From the top of the helmet rises an arched crest-holder; its outer edge is serrated and might be thought to represent a tooth-brush crest, but its curve is followed by a sort of festoon which is probably an unskilful rendering of such an extravagant horn-shaped crest as we have seen double on the Vapheio gem and as occurs single on the gold plaque-bead from Shaft-grave III (Fig. 5, p. 142).⁶ or perhaps the result of a complete misunderstanding of such a design. The helmet on the Vapheio gem has in addition to its two arched crests an

¹ *Eph. Arch.*, 1889, pl. x, 37; *P. of M.* iv, p. 868, fig. 859.

² *Schachtgr.*, I.c., g; *HW.F.*, p. 106, fig. 43 a. Fig. 43 b, which Reichel gives as coming from the same vase, is not reproduced in *Schachtgräber* and is not mentioned by Karo. Presumably, like the chariot fragment of the Siege vase (*HW.F.*, p. 13, fig. 17 c), it disappeared in the interval between the two publications.

³ Randall-MacIver, *Villanovans and Early Etruscans*, pp. 47, 56 and pls. xi, 16 and xii, 3, 7 a and 7 b. Pl. xi, 15 gives an example of the crestless helmet with terminal knob.

⁴ Wace, *Ch.T.*, pl. xxxviii, no. 65.

⁵ *Annuario*, viii/ix, p. 87, fig. 33; *P. of M.* iv, p. 867, fig. 856. The faulty execution of the seal is sufficiently shown by the fact that in the original publication (*Mon. Ant. Linc.* xiii (1903), p. 35, fig. 27) the helmet appeared upside down and was described as an *oggetto indeterminabile*.

⁶ Best seen in the enlarged reproduction, *Schachtgr.*, p. 177, fig. 87.

inverted pyramid rising between them from the knob at the top of the cap.¹ Below are two projections which may be ear-flaps apparently united by a pair of thongs tied in a bow; on either side of the helmet, but quite detached from it, are two rude trefoil ornaments which do not seem to be susceptible of rational interpretation.



FIG. 20

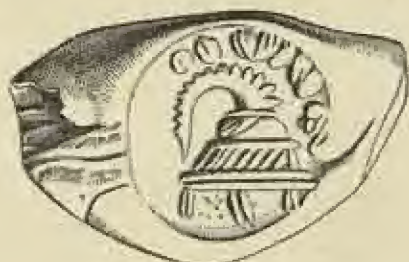


FIG. 21

The boar's tusk helmet appears also in fresco. A fragmentary head from Tiryns affords a probable though not a certain example;² unmistakable evidence is furnished by two fragments from Mycenae³ which give, one the greater part of a helmet, including an indication of the plates both on the cap and on a well-developed cheek-piece which has the shape of a curved triangle, the other the top of the cap, plumeless, crestless, and terminating in a knob. A somewhat abnormal type which appears on a third fragment⁴ is reproduced in Pl. XV, 3.

Finally, on a small tripod hearth from Mycenae⁵ a painting of a boar's tusk helmet is fairly well preserved. It shows clearly marked bands with plates and above them part of a knob and a curving line which may belong to a plume. There is a cheek-piece of the same type as that of the fresco and part of the neck-guard. It is significant that though these portable hearths are well known in Crete and were found in numbers at Nirou Khani,⁶ no Cretan example is decorated with a helmet.

The greatest vogue of the boar's tusk helmet seems to have been in LH I and II, and though still current in the earlier part of LH III, it seems to have gone out of use some considerable time before the end of the period. This is indicated not only by the dating of finds of plates, where this is possible, but by representations of new types in art. Plates were found as stated above in Shaft-graves IV and V and in the Shaft-grave under the Granary,⁷ both of the LH I period, and also in two LH II tholoi (the tomb of Aegisthus at Mycenae and the tomb near the Argive

¹ The object in a fragment of the town mosaic from Knossos has been interpreted as a helmet (*P. of M.* i, p. 309, fig. 228 m). If this is so, it has an inverted pyramid combined with an arched crest-holder.

² *Tiryns*, ii, pl. ii, 2; cf. p. 10.

³ *BSA*, xxv, pl. xxvi c.

⁴ *Eph. Arch.*, 1922, p. 15, fig. 12.

⁵ *AM*, xxxvi, pls. xii, 2 and xi, 2.

⁶ *Ibid.*, p. 225, pl. xxxvii a.

⁷ *BSA*, xxv, p. 56, fig. 14.

Heraion);¹ Kakovatos, where other specimens were found, is an early LH II site.² Plates from Chamber-tomb 8 at Dendra almost certainly belong to LH I-II.³ The plates from Chamber-tombs 515 and 517 at Mycenae were found in contexts not later than LH II,⁴ and those from 518 may well be as early, though owing to the confusion within the tomb certainty is impossible. Similar doubts attach to the examples from chamber-tombs at Asine⁵ and Prosymna.⁶ Examples which certainly date to LH III come from:

1. The already mentioned tomb near Knossos, which is dated a little later than 1400.
2. Chamber-tomb no. 2 at Dendra,⁷ which also contained a large number of bronze vessels of excellent workmanship and the remains of a beaded garment of Egyptian origin. Obviously the tomb is earlier than the period of decline in the later part of LH III; in all probability it belongs to the thirteenth century and to the earlier part of it. As it is a cenotaph there is no question of successive depositions.
3. Spata (Attica),⁸ where from two chamber-tombs, one three-chambered, nearly fifty plates were recovered. There is no record of their distribution. The other material from the tomb is of good LH III quality and includes a considerable quantity of ivory, which ceased to be imported some time before the end of LH III.
4. In the tholos tomb at Menidhi, besides eighty tusks (no. 2002 in the National Museum) prepared, though fragmentary, plates (Nat. Mus. no. 2030) were found in such quantity as to suggest the presence of at least one helmet; unfortunately no record was made of their position. A single tusk was found inside a skull, a pair at the feet of what remained of a skeleton.⁹ An unwrought tusk was found in the Treasury of Atreus,¹⁰ which yielded no plates. It is possible that such tusks belonged to a horned helmet of the Warrior vase type.

While the evidence does not supply a date for the disappearance of the boar's tusk helmet, nothing suggests its survival till the end of LH III.

¹ *BSA*, xciv, pp. 303 and 337. ² *AM*, xxiv (1909), p. 292. ³ *New Tombs*, pp. 45-6 and 51.

⁴ *Ch.T.*, pp. 53 and 73.

⁵ Frödin-Persson, *Asine*, pp. 376, 380, and 420.

⁶ Blegen, *Prosymna*, Tombs XIV and XXVI. Each was in use from LH I down to 'some time in LH III', and in each a bear's tusk was found as well as a few plates. See pp. 94, 95, 98, 168, and 463-4.

⁷ Persson, *Royal Tombs*, p. 103, pl. xxxiv, 2.

⁸ *BCH.*, 1878, p. 224.

⁹ Lolling, *Das Kuppelgrab bei Menidi*, pp. 23, 26, 29, 30, 43, gives a partial record of the tusks. Their exceptional number is perhaps to be accounted for by the neighbourhood of Mt. Parnös, a region in which, according to Pausanias (i. xxxii. 1), wild boars abounded. It would be a convenient hunting-ground for the lords of Menidhi. All the National Museum numbers and the verification of all relevant material there I owe to the kindness of Professor Wace, who examined it in 1941 not many days before Italy's aggression necessitated its removal to a place of safety. No. 1059 (not, as Reichel gives it, no. 1060) refers to a collection of pieces partly wrought, partly unwrought, found by Schliemann outside the Shaft-graves. Presumably they formed a hoard, perhaps the stock-in-trade of a helmet-maker. Other examples found at Mycenae come from chamber-tombs excavated by Tsountas, viz. from Tomb 31, no. 2496, from Tomb 69, no. 2029, from Tomb 75, no. 3039.

¹⁰ *BSA*, xxv, p. 356.

and its absence from the Warrior vase and stele and contemporary sherds is definite evidence on the other side. Nor is it hard to find reasons for its decline. A purely mainland product, it never became an *article d'exportation*, for the simple reason that less elaborate but more efficient head-gear was to be found abroad.¹ Not a single plate has been found in any of the great overseas settlements—in Rhodes, in Cyprus, in Egypt, on the Syrian coast—which mark the expansion of the Mycenaean power abroad and must have brought it into contact, probably not always friendly, with communities in Anatolia, Syria, and elsewhere. Mainland Greece could not afford to remain provincial now that she was in contact with the great military empires of the fourteenth century and an equipment capable of meeting any opponent in the field had become a matter of life and death. At some point between c. 1450, when monumental evidence on this subject fails us, and c. 1230, when it once more becomes available in the figures on the Warrior vase, the body-shield was discarded and the boar's tusk helmet was superseded, though not necessarily at a stroke, and, as the Warrior vase by itself suffices to show, not by a single form. Here then we may take leave of the most explicitly described product of the Bronze Age which appears in the Homeric poems and turn to any evidence available from quarters other than the Greek mainland. To the Ialysos cheek-piece we can now add the bronze helmet from Dendra, the origin of whose type, however, is probably to be sought outside Greece. Apart from these we are entirely dependent on representations in works of art and chiefly on those afforded by signets and sealings, which are necessarily on an extremely small scale.

Kukahm, the latest authority on the subject, who has collected the material available up to 1936,² starts with a helmet presumed Minoan of which he finds two types, firstly, the helmet which consists, or rather whose cranial part or cap consists, of a single piece, and secondly the 'built-up' helmet. Under the first heading a specimen is provided by a sealing from Zakro³ dating to MM III whose design includes a fortress, a pair of figure-of-eight shields, and a conical helmet with a rim, an ear-piece and behind it a long narrow appendage which must represent some form of chin-strap. The helmet is surmounted by a short upright spike which lacks a parallel in Crete. Kukahm consequently suggests that its apparent connexion with the helmet is not intentional; to judge by the reproduction, however, no other interpretation is possible. There is no other example of this helmet in Crete, but it has points of resemblance to that of the Guardian of the Gate at Boghazkeni, a monument later by some considerable time, but still of the Bronze Age (Pl. XVI, 1).

¹ The head on the ivory pyxis from Enkomi cannot well be derived from observation of an actual helmet. Either the pyxis is an import from Greece, or, if it was carved in Cyprus or Syria, the motif is traditional.

² *Der griechische Helm* (Marburg-Lahn, Buchdruckerei Hermann Bauer, 1936).

³ *JHS.* xxii (1902), p. 88, fig. 30, pl. x, no. 131; *P. of M.* i, p. 308, fig. 227 b.

The famous Boxer vase from Hagia Triadha (Pl. XV, 5)¹ exhibits a head-piece which like the Corinthian helmet follows the shape of the cranium and comes low enough at the back to form a neck-guard. There is an opening for the ear below which a long narrow cheek-piece is attached; in front the helmet is prolonged so as to cover the forehead to the eyebrows. This is the only available representation of the type, for an ivory relief from Knossos cited by Kukahn is unpublished and a sealing from Hagia Triadha² which he adduces defies interpretation, at any rate as reproduced. It has been suggested that this elaborate and highly finished type was made for use in sport only, which, given the apparently unwarlike Cretan temperament, is possible, but not demonstrable.

A built-up helmet of a type found on several of the Shaft-grave monuments occurs in a relief on a fragment of a steatite rhyton from Knossos.³ It is conical and fairly tall, with a marked rim and several horizontal bands one above the other; some vertical strokes on these may possibly be meant to represent boar's tusk plates,⁴ but lack the characteristic curve. The helmet is topped by a 'ram's horn' crest which is undoubtedly a tooth-brush crest set into an almost circular holder, the butt of which forms a conical projection in front of the helmet. A similar crest and projection occur on one of the boar's tusk helmets on the silver vase from Shaft-grave IV (Pl. XV, 1),⁵ and centuries later the conical projection appears on some, though not all, of the helmets of the warriors on the relief from Carchemish (Pl. XVI, 2).⁶ Yet another type is represented on a sealing from Knossos⁷ on which a warrior equipped with a figure-of-eight shield wears a very tall sugar-loaf helmet built up of horizontal bands or rolls and terminating in a small fluttering plume. The sugar-loaf shape is associated with Anatolia, where it occurs on Hittite monuments of the Late Bronze Age, such as the rock-carved procession of gods or warriors at Iasili Kaia;⁸ in a very much less pronounced form it is worn by the Boghazkeui Guardian (Pl. XVI, 1) and by one of the certainly human figures, also rock-carved, at Giaour Kalesi.⁹

The largest and clearest representation of the built-up helmet is given on the vase from Isopata cited above (Fig. 22)¹⁰ for the painting of a figure-of-eight shield given on the other side. It consists of a cap which for the most part fits the head closely, but rises slightly to a knob on the top. There is a neck-guard and in front of it a small triangular attachment

¹ *P. of M.* i, pp. 668 and 690, figs. 308 and 311; Rodenwaldt, *Friest*, p. 18, fig. 9; Bossert³, 271-3.

² *P. of M.* i, p. 691, fig. 312.

³ *Ibid.* iii, p. 185, fig. 128.

⁴ See, however, the view of Professor Persson, *NT.*, p. 129.

⁵ *Schachtgr.*, pl. cxxxi, p.

⁶ *Carchemish*, vol. i, pl. B 2.

⁷ *P. of M.* iii, p. 313, fig. 205. See also *ibid.*, i, p. 680, fig. 300 c, for another sealing of somewhat later date, also representing a warrior equipped with a shield, this time small, and with an arched top. The sugar-loaf head-dress is also worn by an unarmed female figure, presumably a goddess; see *loc. cit.*, fig. 300 d.

⁸ K. Bittel, *Die Ruinen von Bogazköy*, p. 91, fig. 58; *P. et C.* iv, p. 643, fig. 319.

⁹ *Ibid.*, p. 719, fig. 352.

¹⁰ p. 139, n. 3, *supra*.

which from its size and position must be an ear-guard, not a cheek-piece. The Guardian of Boghazkeui¹ has an ear-guard with a rounded end and a lace which meets that of the other ear-guard and ties under the chin. A similar tie has been noted in the case of the helmet on the Vapheio gem. The cap of the helmet on the Isopata vase is formed of a series of horizontal bands, doubtless of leather, one above the other; the neck-guard is also divided horizontally and, like the ear-guard, has a marked rim. Only one other piece of Cretan head-gear calls for mention at this point, viz. the 'bee-hive' cap built up of bands and sometimes finished off with a plume which occurs in association with the Eagle goddess on certain clay sealings from Zakro.² It may be that, as the plumes suggest, this is a helmet.

In view of the variety of types it is obviously impossible to talk of a Cretan helmet, though the Boxer type may be indigenous. The other examples either show Anatolian affinities, which in view of the early infiltration of Anatolian stocks into the island is not surprising, or else they resemble mainland helmets of the boar's tusk variety. None of the representations, however, supports the view that this type existed in Crete. They may render an artistic *motif* borrowed from the mainland and sometimes misunderstood, or, as Persson suggests, the helmet may be native and the scanty plating may be of metal. The features which the helmet on the Isopata vase has in common with the typical boar's tusk helmet—the horizontal bands of the cap, the neck-guard, the terminal knob—suggest that we may have here the origin of one form of the boar's tusk helmet; the shape was borrowed from Crete and received the armouring characteristic of the mainland. The original Middle Helladic form was probably simpler and cannot well have owed anything to Cretan influence.

We may now return to the mainland. Most of the examples occur in connexion with the body-shield and are therefore to be found on the monuments already enumerated on p. 143 *supra*. First comes the engraved amethyst in the British Museum (Pl. II, 1). To judge by the crest, though the figure stands full-face, the helmet is shown in profile. It is a conical cap, fairly tall and formed of a thick rim above which rise successive bands or rather thick rolls which suggest padding; there is no trace of neck-guard, ear-guard, or even chin-strap, though in fact these tall helmets must have required something of the kind to keep them on. The crest, which appears to be mounted on a thick spike, consists of two strongly curved sections of unequal size. The larger, to the (spectator's) left, arches round to touch the side of the helmet again and rather resembles the crest-holders on the silver vase from Shaft-grave IV. Sir John Forsdyke suggests that the sections are boar's tusks, a solution supported by the occurrence, noted above, of entire tusks in LH tombs. It is, however, also possible that we

¹ Büttel, *op. cit.*, p. 20, fig. 14.

² *JHS.* xxii (1902), pl. vi. 21, 24, 25, and p. 79, figs. 9 and 10; *P. of M.* iv, p. 867, fig. 854.

have here another example of the tooth-brush crest of the silver vase. The curve is really more suitable to such a holder, while the brush itself could hardly be rendered on so small a scale in such intractable material. This consideration also forbids us to lay stress on the apparent absence of neck-guard, &c. Either form of crest, but especially the boar's tusk, associates the helmet with the mainland rather than with Crete.

Of the Shaft-grave monuments not already considered under the boar's tusk helmet three—viz. the gold ring with the Battle in the Glen from IV and from III the gold plaque-bead and sardonyx with different forms of the Duel (Figs. 2, 5, 6)—provide fairly distinct representations of the helmet. In all cases it is conical and is built up of a small number of thick, perhaps padded, rolls and is surmounted by a knob. To this a plume is sometimes attached (see, e.g., the Battle in the Glen); a plume of strips of gold-leaf found in Shaft-grave V probably belonged to such a helmet.¹ The helmet on the plaque-bead consists of two thick rolls surmounted by two spherical knobs, one above the other; in front of the lower a 'ram's-horn' crest starts from the helmet, arches over the upper, and all but touches the helmet again behind. On the sardonyx the victim's helmet has only a knob; the victor's is surmounted by a similar knob from which a curved object arches forwards; it passes behind his sword hand and is commonly mistaken for a hand-guard of a very modern type. It may well represent a boar's tusk. This single, forward-curving crest is familiar in later times, e.g. on Geometric bronze figurines from Olympia and as miniature votives from Praesos.² Owing to the minute scale of all these representations, it would be rash to dogmatize on the question of neck-guards, cheek-pieces, and chin-straps further than to repeat that this type of helmet requires something to keep it on. A chin-strap is possibly indicated on the shield-warrior's helmet in the Battle of the Glen, and it seems fairly certain that both he and the victor have neck-guards.

On the LM III Cretan gem (Fig. 8) the execution is summary; all that can be said is that the shield-warrior's helmet is of the built-up, conical type. His opponent either lacks a helmet and has short, upright, bristling hair, or wears a helmet with a ridge-crest running right from front to back, like those on the reverse of the Warrior vase. The same doubt (apart from the question of authenticity) exists in the case of both heads on the (alleged) Boeotian gold ring. Karo (*Schachtgr.*, p. 218) appears to regard all these conical, tiered helmets as of the boar's tusk class, and in view of their minute scale the absence of any indication of plates is not a serious objection. So far as the groundwork goes, they are of the same type, comparable to that of the ivory head from Mycenae, though none attains to the five tiers of that superfine specimen. Such examples, and even those which with two or three tiers fully plated demanded thirty or forty pairs of tusks, must have been rare; though doubtless many leather helmets had

¹ *Schachtgr.*, pl. Ivi, no. 039, p. 124.

² *BSA.* viii, pl. x.

a few plates and sometimes perhaps a pair of tusks. The circular bone plates from Shaft-grave V¹ which are pierced with several holes for the attachment of crests or other ornaments show that the two crests of the Vapheio gem are not without parallel. A fragment of a faience vase from Shaft-grave III (Pl. XV, 4)² with two heads of soldiers in relief must be considered, though its origin and the race of the men portrayed are alike uncertain. On the ground of material the vase was long supposed to be Egyptian; now that many admittedly Cretan articles of faience are known the force of this argument is much weakened, though the possibility of an Egyptian origin obviously remains. Pendlebury adhered to this view;³ Karo speaks of the piece as good Cretan work. The one face which is preserved is not Egyptian, nor has it any of the characteristics by which the Egyptians were wont to distinguish alien races. Neither is there any positive reason to regard it as self-portraiture by Minoan or Mycenaean. On the ground of the better-preserved helmet the warriors have been compared to the Shardana depicted on the monuments of Ramses II and Ramses III; though the comparison cannot be pressed in detail, this is at present the most plausible identification. The more complete of the heads wears a conical or rather 'bee-hive' cap, consisting of three bands or rolls, and a chin-strap, all quite undecorated; from the cap once rose four or possibly five horns, of which three are wholly or partly preserved. The second head wears a helmet also built up of rolls and furnished with horns, but expanding towards the top. In both cases the horns may possibly be meant for boars' tusks. In the case of the first head the upper part of the shield rim is extant, but conveys no information as to the shape of the shield.

Horns suggest a connexion with Anatolia, and the Shardana are generally supposed to have been acquainted with the coastal regions of Anatolia, whether they were settled in it or not: There is, however, no evidence for the association of the horned helmet with that country earlier than the fourteenth century, to which the Guardian of Boghazkeui probably belongs. He is undoubtedly divine, but the practical nature of his helmet suggests that the shape was also worn by mortals, and the close resemblance to it of those of the warriors of Carchemish more than half a millennium later makes the possibility a virtual certainty. It is therefore possible that the horn rendered on it in relief, single, but certainly to be thought of as one of a pair projecting from the front, was an ornament in ordinary use and not a mark of divinity. The leaden horns found at the feet of the king of Dendra⁴ together with a sword, spear-heads, and knives are generally accepted as having formed part of a helmet; they appear to represent the horns of a bull.

¹ *Schachter*, pl. lxx, nos. 532-5.

² *Ibid.*, pl. xxiii, nos. 123-4, pp. 60-1, fig. 16. The reproduction given *HW*,² p. 44, fig. 23, is inadequate, that of *P. of M.* iv, p. 868, fig. 858, is not completely accurate.

³ *Aegyptiaca*, p. 36, no. 90.

⁴ *Royal Tombs*, p. 17.

The commonest form of Minoan-Mycenaean helmet is, as we have seen, conical, sometimes, as on the Isopata vase, only slightly so, sometimes taller, as in the case of the ivory heads and the combatants of the Battle in the Glen, but always on the mainland stopping well short of sugar-loaf height. It must from the first have had a chin-strap, which might be superseded by cheek-pieces. It is possible that the only slightly conical Isopata type came to prevail on the mainland, for the helmet painted on the stucco hearth has only three horizontal bands, that on the megaron frieze only two, including that which forms the top. Both have cheek-pieces; so, apparently, has the very fragmentary helmet in the fresco from the west portal of the Palace of Mycenae.¹ A neck-guard, distinctly rendered on the stucco hearth, may be presumed in all cases.

According to Kukahn (op. cit., pp. 6 and 17) the characteristic features of this helmet—close-fitting cap rising to a slight cone, neck-guard, and cheek-piece—were perpetuated in Cyprus and appear, translated into metal, in bronze helmets of the Iron Age.² On this assumption the original must have been carried to Cyprus by Mycenaean settlers of the fourteenth century and, to account for its survival, must have passed into fairly general use. For this there is no evidence whatever; Furtwängler's view that the Cypriot type originated in Anatolia is far more probable. Kukahn's opinion, based on the evidence of the Ialysos cheek-piece (found, apparently, with no other vestige of a helmet)³ that at first only appendages to the helmet were plated cannot be maintained in view of the new material now available. Three small votive objects of Hellenic date from Bassai have been interpreted as cheek-pieces, but, if the reproduction is to be relied on, bear no resemblance to any known type.⁴

Having passed in review all available material of earlier date than the Warrior vase, we are in a position to consider Professor Persson's remarkable find (Pl. XIV).⁵ It is a bronze helmet, bearing a rude resemblance to the Corinthian type inasmuch as it is fashioned from a single piece of metal and has cheek-pieces. These, however, do not fit close to the face but pro-

¹ *AM.* xxxvi (1911), pl. x (actual condition); *BSA.* xxv, pl. xxvii (restored).

² *Ol.* iv, pl. lxii, no. 1931, Textb., p. 172. A second example from which the cheek-pieces are missing was found in the recent German excavations at Olympia (*Jh.* lii, 1937, *Olympia-bericht*, p. 52, pl. 6, right). Furtwängler knew only two parallels, both from Cyprus and both unpublished. Cypriot provenance pointed to derivation from the Near East, and Assyria, where the cheek-piece was never adopted, was out of the question. This argument by elimination is all that can at present be put forward in favour of Anatolia, which none the less is the most likely candidate. Furtwängler regarded the examples from Olympia as dedications by Ionian Greeks.

³ The excavation of the chamber-tombs in one of which the cheek-piece was found was carried out in 1868 and 1870 by Billotti, H.B.M.'s Vice-Consul in Rhodes and was not conducted on scientific lines. Fragmentary remains on a small scale might well be overlooked or deliberately neglected.

⁴ *Eph. Arch.*, 1910, p. 315, fig. 34; Kukahn, p. 3 and n. 45, p. 58.

⁵ From Chamber-tomb no. 8 at Dendra (*N.T.*, pp. 43 and 119 ff. and pl. i and p. 120, fig. 114).

ject in front of it, cutting off, almost like blinkers, the wearer's side-view and leaving his face exposed. Further, the front part of the crown of the head is left unprotected, the helmet being cut back at this point, presumably, as Professor Persson learned from the artificer employed to produce a copy, to facilitate the difficult operation of beating out the head at the back. Behind this opening there were two holes, presumably for the attachment of a crest. The helmet had a lining, holes for whose attachment run round the rim and whose thickness is estimated at not less than centimetre; presumably it covered the exposed part of the front of the head. The lower rim of the cheek-pieces and back of the helmet forms a single horizontal line just clearing the wearer's shoulders.

In the tomb in which the helmet was found three periods could be distinguished—LH I, LH I-LH II, and LH III. To the second, which is that of Kakovatos and Vapheio, the excavator assigns the helmet. In LH II Mycenae was extending the area of her trade to the west coast of Anatolia and to the Near East. Importation of the unique article cannot therefore be excluded, and Oriental influences may be suspected; the original home of the helmet was Babylonia, and it is natural to look to the Near East for developments and improvements. No evidence, however, is at present forthcoming for the existence in Anatolia or Syria of metal-plated or metal helmets at this early date. The bronze cheek-piece of Ialysos is the earliest example from the east side of the Aegean, and though the helmets of the gods (as they are now taken to be) marching in procession on the relief of Iasili Kaia are thought to be metal-plated, their date is no earlier.¹ There is therefore no positive evidence to oppose to Professor Persson's view that the metal helmet made in one piece is a Mycenaean invention. On the other hand, it may be urged that the Mycenaeans are shown by the evidence of the Shaft-graves to have taken over from Crete not only sword and spear but shield, and if they stuck to boar's tusk plating for their helmets, one at least of its forms was identical with a Cretan type. There is therefore a certain presumption that the Dendra helmet has a model in Crete. Despite differences, there is a real resemblance to the helmets of the Boxer vase (which have a very metallic appearance) in that there, too, the cap follows the shape of the cranium and that they are made in one piece, even to the cheek-pieces whose shape differentiates them from the Dendra specimen. There is something to be said for the view that the latter is the result of an effort to reproduce the Cretan form. If this is the case, the result was not entirely satisfactory, for the blinker effect of the side-walls and the exposure of the top of the head are serious defects, the latter especially disadvantageous in attacks on fortified places, when missiles from above must have been dreaded above everything else.²

¹ The reliefs are ascribed to the century 1350-1250 (Bittel, *Die Ruinen*, p. 93).

² Professor Persson proposes an attractive explanation of several pieces of bronze shaped somewhat like the sole of a shoe found by the Swedish Expedition in the sanctuary at Idalion

The slashing sword, whose introduction, as we shall see, almost certainly led to that of the Warrior vase helmets and kindred developments, appears too late to have played any part here. If the Dendra helmet is indeed an experiment which failed, the fact that nothing similar was found in the contemporary pit of the Vapheio tholos or the later one of the Dendra king's finds a ready explanation. It is to be hoped that further finds will throw light on this interesting and important object.¹

The Warrior vase (Pl. III), which records a marked break with the armature of the preceding period, exhibits two new types of helmet. That on the obverse is distinguished from its predecessors by a very pronounced peak, rather like that of a deer-stalker cap, in front, covering the whole forehead, and another behind, which, however, protects only the upper part of the neck; there is no separate neck-guard nor cheek-piece. Both peaks, however, would afford considerable protection against slashing sword-strokes from above, especially in front, where a pair of horns forms a further obstacle to a direct cut. All the helmets are painted in dark silhouette thickly sprinkled with white spots which presumably represent metal disks on a leather structure. In most cases the beginning of a chin-strap which presently disappears under the beard is indicated by one, two, or three white spots. Each helmet terminates above in a cup-like projection from which a rather scanty plume emerges to hang behind. It seems likely that this helmet was developed in response to the appearance of the slashing sword, current in Mediterranean lands from 1300 onwards, perhaps rather earlier, against which it would afford very fair protection, though leaving the face more open to attack with the point. The neck seems more seriously exposed, though it must be remembered that the bronze slashing sword is often comparatively small and light, seldom attains the weight of many of its iron successors, and could not take such an edge. Though a sideways slash might no doubt inflict a formidable neck-wound, no one could with such a sword take off his opponent's head, as Homeric warriors are sometimes said to do. The development of the Shardan helmet which can be followed on reliefs of Ramses II and Ramses III is curiously parallel; the skull-cap of the thirteenth century with its fore and aft horns, or rather pairs of horns, and central knob raised on a stalk persists indeed (Fig. 23 a), but a plain, deep, 'pot' helmet, horned but knobless,

(SCF. II, p. 579, pl. clxxvi, described as lateral pieces of helmets) as plates for armouring the tops of leather helmets. Similar pieces found long ago at Tanassos are illustrated by Ohnefalsch-Richter, *Kypros, Die Bibel u. Homer*, pl. lxx, 4-8. In neither case is there any example of a pair. If the explanation is correct, the need felt to give special protection to a vital and menaced spot is well illustrated. Cf. Syria, xx (1939), pp. 288-1 for the case of a skeleton two of whose dorsal vertebrae were transfixated by an arrow travelling in a line approaching the vertical.

¹ The helmet worn by the fallen man on the stele from Shaft-grave V can hardly be adduced in evidence, in view of the extremely weathered condition of the stone (BSA. xxv, pl. xix, and p. 128). If it is indeed of the Dendra type, it is perhaps significant that it belongs to a defeated man who uses the Minoan body-shield and not to his Mycenaean conqueror.

coming well down over neck and forehead and secured by a chin-strap¹ makes its appearance at this date (Fig. 23 *b*). Though apart from the horns it has no single point of contact with either of the Warrior vase helmets, it



FIG. 23



FIG. 24

offers much the same kind of defence. Unfortunately the helmet on the reverse of the vase is much less perfectly recorded. Only one example is complete, and the only other which contributes fresh detail (that of the foremost man) does not completely tally with it. One feature, however, is

¹ Ramses II, E. Meyer, *G d A*, ii, 1, pl. v; Bossert², fig. 551. Ramses III: The University of Chicago Oriental Institute Publications, *Medinet Habu*, i, pl. 39. The helmet is once, in the case of a slain Shardan, shown full-face or rather full-back (Bossert², fig. 551, right-hand figure on upper register) and has two horns symmetrically placed; it is therefore fairly certain that each horn seen in profile represents a pair.

common to all—a ridge-crest running the whole way from front to back. A leather helmet of this sort would naturally be made in two halves between which the crest would be inserted and which would then be stitched together. The complete helmet on the Warrior vase consists of a small skull-cap which expands above the head, forming a very tall ridge in which the crest is inserted. The helmet of the leading man has no such ridge, but is a plain cap with a slight peak over the forehead. All the helmets are painted in dark silhouette with white spots and are to be thought of as of leather strengthened with metal disks. The helmets on the Warrior stele (Pl. II) can be seen to be of the same type, but are so faded that nothing fresh can be learned from them. The ridge-crest has already appeared on the silver vase from Shaft-grave IV, outlining the entire profile of a conical helmet.¹ Some sort of cap with ridge-crest is worn by the man who spears a boar on a gem from Vapheio,² but the scale is too small to allow of detail, and the same is true of the head-gear of the defenders on the Siege vase, who possibly wear nothing but their own hair. A curiously exact parallel, however, to the perfect specimen on the Warrior vase is to be found on a bronze figurine from Marash,³ an Early Iron Age site in the extreme north-east of Syria (Fig. 24). The figure wears the characteristic Anatolian kilt, and though it can be safely said to be later than the Warrior vase, the fact points to a common Anatolian origin for the helmets in question. There is yet another example of the ridge-crest helmet at Mycenae, this time in a somewhat different form; it occurs on a sherd from a chamber-tomb excavated by Tsountas (Fig. 26).⁴ The execution is too crude to allow of confident conclusions as to the structure of the helmet save that in addition to the ridge-crest it had a horn, i.e. a pair of horns, both before and behind. As the beard is visible, but only at the extreme point of the chin, it is probable that a cheek-piece is indicated. An equally late sherd published by Furtwängler and Loeschke⁵ shows a helmet worn by a man who stands holding a spear in one hand and the reins of a horse in the other; a plume rises directly from the top of the head and hangs over the back of it. Here also it is probable that we have a cheek-piece helmet, for no feature but the eye is indicated. Two other LH III sherds of a very late type from Mycenae⁶ show head-dresses which may or may not be helmets. On the first is a fragment of a belated bull-leaping scene; the acrobat wears the sugar-loaf head-dress with a pair of horns which we have seen reason to associate with Anatolia and which has no parallel in

¹ *Schachtgr.* cxxxix; cf. *supra*, p. 216, Pl. XV, 2g.

² *BSA.* xxxvii, p. 190, fig. 4, a much more distinct reproduction than that of the original publication, *Eph. Arch.*, 1889, pl. x, 15.

³ *P. et C.* iii, p. 447, figs. 319 and 320.

⁴ *HW.* 2, p. 107, fig. 44.

⁵ *F. und L.*, pl. xxxviii, 395.

⁶ *HW.* 2, p. 109, figs. 49 and 50. A conical cap with the peak curving forwards occurs on a Cypro-Myc. vase (*P. et C.* iii, p. 715, fig. 526); it is worn by a long-robed figure and there is nothing in this case to suggest that it is a helmet.

Minoan scenes of the bull-ring (Pl. XVI, 3). To the nature of the scene on the second sherd we have no clue; nothing survives but a male bust with a tall conical head-dress inclined slightly backwards (Fig. 25). On yet a third sherd¹ a head-dress of this type occurs, but appears in this case to be a



FIG. 25



FIG. 26

helmet, for though the face is exposed, the cap is extended behind, not only to cover the back of the head, but to form a neck-guard as well. From a point near the top a ridge-crest runs down the back and on to the neck-guard (Pl. XVI, 4). This helmet is almost exactly paralleled by that of the second Amazon on one of the two votive shields from Tiryns.

That the ridge-crest is of Anatolian origin is fairly certain. The earliest datable examples are found on some of the bronze reliefs from the Gates of Shalmaneser III (Pl. VI, 4 b)² on which he recorded his campaigns against Armenia from 857 to 850 and are worn by his opponents the Urartians; it is doubtless from this quarter that the Assyrians borrowed it. In the succeeding century, under Tiglath-Pileser III, the tooth-brush crest begins to appear on Assyrian helmets, but in a new form, mounted on a stilt (Fig. 27). In this form and borrowed presumably from an ultimately Anatolian source it makes an appearance on the latest Geometric vases in Attica (Fig. 28),³ where it may be meant to represent the cheek-piece helmet worn by a couple of Geometric bronze figurines to be described below.

Though the Urartians are the earliest identifiable wearers of the ridge-crest helmet in Anatolia, it is possible that we have examples of it on a monument earlier by a millennium than the Gates of Shalmaneser. The crested heads on the Phaistos disk⁴ are generally compared to the feather-crowned Pulesati of Egyptian reliefs, but the decoration is much more like

¹ F. and L., pl. xl, 422.

² L. W. King, *Bronze Reliefs from the Gates of Shalmaneser*, pls. iv, ix, xxxvii, xxxviii, xli, xlii; cf. H. Bonnet, *Die Waffen der Völker des alten Orients*, p. 206, fig. 102 f and d.

³ e.g. worn by warriors on fragments of a large vase in the Vlastos collection at Athens (unpublished); also on sherds published *AM.* xvii (1892), pl. x, one of which is reproduced in Fig. 28. Cf. p. 233, n. 5.

⁴ *P. of M.* I, pp. 650 and 652, figs. 482, 483, 2; Bossert¹, figs. 517-18.

a crest than a circlet. We have seen by several examples the extraordinary persistence of certain forms of helmet or of decorative features. It seems quite possible that in the skull-cap with ridge-crest we have a simple, well-nigh imperishable form, for we meet it again, now equipped with



FIG. 27



FIG. 28

cheek-pieces, worn by three archers on a Cretan bronze relief which shows strong Oriental influence (Pl. XI, 3),¹ and also by the assailants and one of the defenders of the city wall on the Amathus bowl.² The horseman on the proto-Geometric cremation vase from Moulianá (Fig. 10, p. 154, *supra*) wears a form which it would be rash to interpret in detail, but which has a distinct resemblance to the Warrior vase ridge-crest helmet and to that of the figurine from Marash (Fig. 24). Here, too, Oriental influence is indicated by the representation of horsemanship, the earliest in Greek art.

In the East the helmet has a long history, beginning in Babylonia, which does not, however, concern us, until in the course of the Egyptian wars of conquest in Syria under the XVIIIth Dynasty we have records of it on Egyptian monuments. On the chariot of Thothmes IV (1420-1411) the helmet worn by a Semitic chief (Fig. 16) consists of a conical cap with vertical divisions which probably represent metal plating (cf. the Iasili Kaia figures, *supra*, p. 226) and a scanty plume, perhaps the tail of an animal, rising from the top.³ At the back it comes down far enough to meet the collar of the corslet, in front it covers the forehead; it also occurs with a projection which may be a rudimentary ear-guard,⁴ or rather perhaps the point of attachment of the chin-strap.

It will be observed that the Shardana guards of Ramses III who accompany him on a lion-hunt⁵ retain the stalk and knob, though in other

¹ *JHS*, lili (1933), p. 291, fig. 16 (worn by the three archers).

² *Ibid.*, pl. 1.

³ Meyer, *Fremdvölkerphot.* 15; Wolf, *Bewaffnung*, p. 96, fig. 67.

⁴ Meyer, *loc. cit.*; Wolf, *op. cit.*, p. 97, fig. 68, below, left; Bonnet, *Die Waffen*, p. 208, fig. 103, below, left.

⁵ *Medinet Hahu*, i, pl. 35.

respects the helmet is of the more advanced type coming well down over the head both in front and behind and having moreover a feature which does not appear on the helmets of Egypt's Shardana enemies, viz. a prolongation of the side to which the chin-strap is attached so that it almost entirely covers the ear. This seems to be derived from the Syrian conical or rather egg-shaped helmet or cap which figures on Egyptian monuments as Semitic tribute and is virtually identical with one of the types already noted on the chariot of Thothmes IV (Fig. 16, p. 198, *supra*).¹ It was adopted to some extent in Egypt, where the plume is replaced by a pair of tassels and the cap is not divided vertically, but built up of horizontal strips (Pl. XVI, 5). The helmets which are issued to the Egyptian troops of Ramses III and worn by them in the Sea-fight² also have a pair of tassels, but in shape exactly resemble the Egyptian wig, covering the back and sides of the head and the forehead. It may well be that the great Shardan broad-sword and the Achaian slashing sword, of which Gaza and Ugarit have furnished examples, helped to determine a new departure in Egyptian armature; never before have the rank and file of Egypt appeared in helmets. The Shardana of the Sea-fight, who are all on the raiding side, wear helmets which except by the absence of the knob differ little, if at all, from the thirteenth-century type; some, however, have helmets as deep as those of the Shardana of the Lion-hunt, but without the ear-guard.³

It is possible in the American reproductions of the Medinet Habu reliefs to get a more detailed view of the head-gear of the Pulesati than has hitherto been obtainable.⁴ The visible part consists of a circlet decorated with circles or a chevron and presumably of metal into which feathers are set upright so as to form a crown. The back of the head is protected by a guard formed of a series of horizontal strips, no doubt of leather; occasionally a few of the upper strips are carried round the forehead below the circlet. Presumably there was a complete leather cap the top of which was concealed by the feathers. The helmet is kept in place by a chin-strap or by a tie the two ends of which are often visible. While the Shardan helmet, like the corslet, cannot be shown to have survived the Bronze Age, that of the Pulesati is generally thought, on the strength of Herodotus' description of the helmets of the Lykian contingent in Xerxes' army, to have lived on in Lykia.⁵

That the helmet of metal or partially plated had vanished from the

¹ Wolf, *Bewaffnung*, p. 97, fig. 68, above and left below; Bonnet, *Die Waffen*, p. 208, fig. 103, ditto.

² *Medinet Habu*, i, pls. 29 and 39.

³ *Fremdvölkerphot.* 455 a; Wolf, p. 64, fig. 43; *Medinet Habu*, i, pl. 39.

⁴ *Ibid.*, pl. 35.

⁵ Herodotus, vii. 92 $\alpha\delta\omicron\upsilon\varsigma \pi\epsilon\pi\epsilon\sigma\omicron\tau\alpha\iota \pi\epsilon\pi\iota\kappa\tau\epsilon\sigma\tau\epsilon\phi\alpha\upsilon\mu\epsilon\lambda\omicron\iota\varsigma$. No confirmation is to be had from the feather-crowned men on a series of reliefs from Kuyunjik who were mistakenly supposed by the late H. R. Hall to be Ionians and Carians (*JHS.* xxxi, 1911, p. 122, fig. 7). They have now been identified in some cases as Elamites, in others as Assyrians, and the head-dress is not military, but has a religious and ceremonial significance. See Pulani and Weidner, *Archiv für Orientforschung*, xl, pp. 128-30.

Aegean world before the end of the Bronze Age is suggested by the more primitive structure of the Warrior vase helmets, which have only a sprinkling of metal disks. There is no surviving vestige of a helmet of the proto-Geometric age nor, apart from the example from Mouliáná cited above, any representation of one. That they were of perishable material is a fairly safe conclusion, since otherwise some remains, however fragmentary, must have been preserved in one or other of the fairly numerous tombs—at Vrokastro, at Mouliáná, in the Kerameikos, and on Skyros—which have yielded arms. Geometric graves tell the same tale. The cremation deposits at Halos and several Geometric graves at Athens, especially those in the region of the Areopagus, yielded arms, but no trace of defensive armour. One in the Dipylon region contained remains of two spears, an iron sword, a dagger, and among them a small bronze tube (4 cm. in length) which Reichel interpreted as the crest-holder of a helmet. If this extremely plausible identification, in which Reichel is followed by Kukahn, is correct, it is at present the sole surviving relic of a Geometric helmet.¹

Helmets in Geometric vase-painting occur almost exclusively on Attic ware. The regular type is a cap-fitting close to the head from which it is not, as a rule, distinguished except by a rather meagre plume floating from the top.² This, the only type which occurs on the earlier vases, persists to the end, developing a rather more voluminous plume;³ it occurs even on the Late Geometric amphora in the Benaki Museum, the soldiers on which carry round shields with patterns and even blazons.⁴ On a vase in the collection of Mr. Vlastos, however, on which round shields with patterns are carried, the helmet has a stilted crest running fore and aft. The same form occurs on a pedestal krater of a very late type, again in conjunction with round shields with patterns,⁵ and is also worn by a horseman on the same vase, the first cavalryman recorded on the Greek mainland (Fig. 28).

¹ *AM.* xviii (1893), p. 108; *HW.²*, p. 110, n. 1; Kukahn, p. 8. Reichel found that the object was not to be traced in the National Museum. He is undoubtedly right in his contention that the find-spot of the tube—not by the head, but by the side of the skeleton—does not make against his interpretation. The lead horns referred to above lay at the feet of the skeleton of the king at Dendra, and a pair of boar's tusks was found beside the legs of a skeleton in the tholos at Menidhi (*Das Kuppelgrab*, pp. 22-3). It is possibly worth noting that Eteion was burned *ad*, not *de*, *Evrosi* (Z 418) and that in the case of Elpenor, *κεκός* + *ἑσά* and *κεύρα* *κεκός*, n. 13, which does not suggest that the corpse was wearing his equipment.

² See fig. 12, p. 157, *supra*. The helmet is shown in outline by a line following the contour of the head on a very late Geometric sherd, *AM.* xvii (1892), p. 211, fig. 2 = *HW.²*, p. 109, fig. 51.

³ *Arch. Zeit.*, 1885, p. 139; *Annali del Istituto*, 1872, pl. 1 = *HW.²*, pp. 124-5, figs. 66, 67. On a pedestal krater in New York (*Bull. Met. Mus.* xxix, 1934, p. 170, figs. 1 and 2) all the figures with Geometric helmets have considerable plumes. The archer in fig. 1 has a ridge-crest, and the man left of the sword duel in fig. 2 has a long fore and aft crest, unstilted.

⁴ *BSA.* xlii, pl. 19.

⁵ *AM.* xvii (1892), p. 215, fig. 3, and pl. x; *HW.²*, p. 110, fig. 52. The helmet, which is only partially preserved, seems to be composed of horizontal rolls or pads. The horseman on the proto-Geometric vase from Mouliáná has a ridge-crest on the top of his head, but the execution is too crude to allow of conclusions about the helmet.

In this case the rear half of the crest has become long and plume-like as it has on a very late Geometric sherd at Heidelberg,¹ on the proto-Attic plaque from Sounion,² and on the Hymettus amphora.³ In the last two cases the helmet has cheek-pieces; it is an early form of the classical Attic helmet.

There can be no doubt that like the round shield the stilted ridge-crest came from the East; we have noted it on Assyrian helmets. Outside Attica it occurs in a very exaggerated form worn by the warrior with an omphalos shield on the Geometric seal-stone from Siphnos (Pl. VI, 5), while the form with a long tail behind is worn by both sides in the sea-fight on the vase of Aristonothos (Pl. XVII, 1).

On a fragment of a Geometric pyxis from the Argive Heraion (Pl. XVII, 2)⁴ we have an unusually good representation of a helmet, certainly of metal and with a slightly stilted plume drooping at front and back, which with a tripod is probably destined to be a prize in some athletic contest. It is differentiated from the Corinthian type not only by the plume but by its profile. The lower edge is not horizontal as that of the Corinthian helmet is from the very beginning; behind, the helmet would cover only the back of the head, leaving the neck exposed, but in front it is prolonged downwards to form cheek-pieces. It probably illustrates an early form of all-metal helmet found both in the early and in the more recent excavations at Olympia, in the latter case perfect except at the top where the attachment of the crest has been broken away.⁵ In front it must have come down to the eyebrows, but lacks a nasal; it is not made in one piece like the Corinthian helmet, but is composed of two halves soldered together. The pyxis belongs to the second half of the eighth century, but by no means to its end. On the considerably later Aristonothos vase, regarded by many as Argive, the warriors on both sides wear helmets which have no cheek-pieces and require chin-straps to keep them on.⁶

With vase-paintings must be classed the two votive terra-cotta shields from Tiryns (Pls. IX, X):⁷ they are of a size exceptional in votives and belong to the final phase of the Geometric period. In the principal scene on the larger the Amazons wear tall sugar-loaf helmets with a forward curve and a ridge-crest running all the way back;⁸ attached to the cap is a

¹ *AM.* xliii (1918), p. 137, fig. 31.

² *BSA.* xxxv, pl. 40 b.

³ *Ibid.* xlii, p. 86, fig. 4.

⁴ *Ibid.* xxxv, pl. 26, 2; *AH.* II, pl. ix, 19 b. The 'crest' is loose and flowing and may be a plume; it would suit Hector's helmet in the scene with Astyanax. Whether crest or plume, it comes down too low in front, though only slightly. No doubt this is why Kukahn thinks that it runs across the helmet and not fore and aft, a form which we have seen, though not stilted, at Olympia (*Ol.* iv, no. 242, pl. xvi); but it is more likely that the artist of the pyxis has made a slight miscalculation.

⁵ *Ol.* iv, no. 1029; *Jb.* lii (1937), *Olympiabbericht*, pl. 6, left, and p. 32.

⁶ Though the men of the right-hand vessel are armed, apart from the greater size of their shields, in the same way as their opponents, the curved keel of their ship suggests that they are Phoenicians. The man in the crow's nest is a non-Greek feature, for which a Sharden ship in the Sea-raid affords a parallel. If this is not a regular naval battle but an encounter of trade rivals, the absence of hoplite equipment is natural.

⁷ *v. supra*, p. 170.

⁸ A similar helmet occurs on a sub-Geometric sherd from Sparta (*BSA.* xxviii, p. 57, fig. 4).

back-piece which covers the back of the head and gives some protection to the neck as well. This is the helmet which we have already noted on a LH III sherd from Mycenae (Pl. XVI, 4). The general structure of the Greek protagonist's helmet is similar, though it is not prolonged so far at the back. At the top of the sugar-loaf is a ridge-crest with a draught-board pattern which obviously does not consist of bristles and may perhaps be of leather, as Kukahn takes the white-spotted crests on the Aristonothos vase to be; from it depend long strands of hair. Being about the height of the Guards' bear-skin, this helmet is an awe-inspiring object. On the smaller shield a Greek wears a helmet with a slightly stilted fore and aft ridge-crest which does not follow the curve of the head, but is nearly horizontal; it also has a peak to protect the forehead and a long pointed side-piece which covers the jaw rather than the cheek—unless, indeed, a beard is intended. The warriors on the Sounion plaque, however, have unmistakable cheek-pieces.

Certain Geometric bronze figurines, principally charioteers, have sugar-loaf helmets with a backward curve—or possibly the infantry type worn back to front *ad hoc* since it is obviously a better shape for meeting a rush of wind—and a chevron which probably represents a tooth-brush crest along the frontal edge.¹ Another type, the spearman on foot, occurs twice with a more developed helmet. One perfect specimen from Olympia (Pl. XVII, 3 a)² has a tall, forward-curving crest-holder with, apparently, a tooth-brush crest and also has fully developed cheek-pieces; these must be either of metal or metal-plated. The second figure is from Delphi (Pl. XVII, 3 b);³ it has lost the crest of an otherwise similar helmet. A Geometric bronze figurine in New York represents an armourer making a helmet of this sort.⁴ Five small votive helmets with forward-curving crests roughly fashioned out of sheet-bronze were found on the Altar Hill at Praesos;⁵ they are calculated to cover the back and sides of the head, and much of the face, but have not the cheek-pieces of the Corinthian helmet. The somewhat similar crest on the sardonix from Shaft-grave III has been noted above.

Olympia has also produced an example of the forward-curving crest-holder⁶ and of an unusual form of sugar-loaf which expands at the top into a symmetrical fore-and-aft crest.⁷ The first of these also occurs in a rock-carving on Thera, together with a shape which may be the embryo of the second, in that it is conical and expands at the top into a fan-shaped knob.⁸ A freak form on a bronze figurine from Olympia has a huge crest running transversely across the head and fanned out like a peacock's tail.⁹

¹ *Ol.* iv, pl. xv, no. 249, and xvi, 251 and 251 a; Lamb, xvi a. This last has a boss on each side which Furtwängler took to be the Homeric *phalapa*.

² *Ol.* iv, pl. xv, no. 247; Lamb, pl. xv c; cf. p. 41.

³ *Fouilles de Delphes*, v, pl. i, 7; Lamb, pl. xv d. ⁴ *AJ.A.* xlviii (1944), pp. 1-2, figs. 1-4.

⁵ *BSA.* viii, pl. x, and p. 258. ⁶ *Ol.* iv, pl. xvi, no. 245. ⁷ *l.c.*, no. 243.

⁸ *Thera*, iii, p. 79, figs. 64 and 65. ⁹ *Ol.* iv, pl. xvi, no. 247.

The dominant form throughout the period is the sugar-loaf, which is worn by both Herakles and the Centaur in the small bronze group in New York; both helmets have lost the peak, but the beginning of a backward curve survives in the Centaur's. The same form appears on a terra-cotta figurine of a warrior from Cyprus.¹ A new feature is the series of plastic rolls of which the surviving part of both helmets is formed. The man in a group of man, lion, and dog in a small bronze from Samos² wears a forward-curving sugar-loaf; so, too, to judge by the remaining fragment, does a bronze figurine of a youth in the National Museum at Athens.³ A terra-cotta head from the Anyklaion⁴ wears an erect, conical helmet of which the top is missing; long strands of the plume run down the back of the cap and head. An archaic terra-cotta head from beneath the Rhoikos altar at the Heraion of Samos⁵ has a helmet consisting of a round cap with a slight rim and (apparently) a short transverse ridge-crest from which several thick strands run down the sides and back of the head. In profile this is not very far removed from the helmets of the Attic Geometric vases. From a tomb in the Fortezza cemetery near Knossos come a couple of small bronze reliefs⁶ described by Payne as being, despite their many Oriental features, certainly of Cretan workmanship and of the seventh century (Pl. XI, 2, 3). On one (already noted above) three archers armed with the Oriental bow assail the two occupants of a chariot; they wear close-fitting helmets with ridge-crests and cheek-pieces, which in no way differ from Corinthian helmets. The charioteer and paraibates have similar helmets, surmounted, however, by a superstructure which it is not easy to interpret. In the case of the charioteer it need be no more than an addition to the ridge-crest, a long slender horn curving backwards to the neck. The paraibates, however, seems to have a conical helmet of a type presently to be described superimposed on the ridge-crest helmet. As the relief has suffered some injury and the drawing was made before the fragments were joined, it is possible that there may be slight errors of detail. The second relief, however, which represents a hero between two lions, gives a good picture of the conical helmet referred to, which is shaped like the narrow end of an egg and is prolonged behind to form a neck-guard; a ridge-crest, from which a long strand depends, runs over the top and back of the head. This is a type long established in Anatolia, for it is that of the helmet worn by the Guardian of the Gate at Boghazkeui, though it lacks the Guardian's ear-guard. At Carchemish we find it worn by the marching procession of warriors (Pl. XVI, 2),⁷ an instance possibly rather earlier than the Cretan example, for the relief lacks those Assyrianizing features which are marked in Syro-Hittite work in its later stage. The men

¹ Kunze, *AM.* lv (1930), Beil. 38, 1; Hampe, pl. 30, 3 a; SCE: ii, pl. ccxxi, 8; cf. pl. cciv.

² Hampe, pl. 30, 3 b. ³ Kunze, *loc. cit.*, Beil. 44 and 45.

⁴ *Ibid.*, Beil. 42, 2 and 43, 2; Hampe, pl. 31, 2 a. ⁵ *JHS.* liii (1933), p. 289, fig. 14.

⁶ *Ibid.*, p. 291, fig. 16.

⁷ *Carchemish*, i, pl. B 2.

of Carchemish wear the conical helmet with the addition in some cases of a conical projection just above the forehead similar to that which we have noticed on a silver fragment from Shaft-grave IV.¹ Possibly they have cheek-pieces, a development of the ear-flap of the Guardian; possibly the artist meant to represent a short beard worn without a moustache. On the Hunt shield from the Idaean cave (Pl. VIII, 1)² the conical helmet is worn by the two men with 'Boeotian' shields in the outer zone and by the archer and swordsman in the main circle. The only difference from the other examples cited is that the tail of the crest, instead of hanging in loose strands, is single and turns up at the end. Like the reliefs, the Hunt shield shows abundant traces of Oriental influence, and is probably of approximately the same date.

THE HELMET IN HOMER

It is plain that in both the Late Bronze and the Early Iron Age various forms of helmet were current in the Aegean area, and it is perfectly possible that they were originally designated by the Homeric terms *κόρυς*, *κυνέη*, *τρουφάλεια*, *πίληξ*; *στεφάνη* and (*ἅπας λεγόμενον καυτήνυξ*) may be disregarded for the moment. Unfortunately, except in the case of the boar's tusk helmet we have no means of identifying the terms with the forms current in art, and the fact that that unique specimen is called *κυνέη* shows that the word had a general application. We do not know whether they ever coexisted as living words in the spoken language; it is improbable that they did, for the metrical exigencies of the hexameter must always have tended to the perpetuation of obsolete words.

The question of the Homeric helmet has nevertheless been illuminated in certain ways since the contributions to its solution made by Reichel and Robert, acute as these were. The discovery of the bronze helmet at Dendra and the recognition of the cheek-piece from Ialysos show that neither helmets of metal nor metal reinforcement need necessarily be regarded with Reichel as interpolations in the Mycenaean tradition, while the late appearance of the Corinthian helmet which, whether or no it was associated with the hoplite shield, does not appear before it, forbids us to recognize it with Helbig and Robert³ as legitimately present in epic.

Several constant epithets of the helmet describe it as either made of

¹ *supra*, p. 220.

² KBR., Bell. i and p. 217. One helmet in the inner and one in the outer circle exhibit a slight difference in that the part which supports the crest is separated by an indentation from that below it.

³ *HE.*, pp. 295 ff.; *Studien*, pp. 47 ff. It is surprising that Robert should select the Corinthian helmet as exemplifying the formula *θεῖοι δὲ λόφοι καλὴν ἔχοντες ἑνέρον*. True, he had not before him all the evidence which justifies the conclusion that in its early days the Corinthian helmet frequently had no crest at all; but the Corinthian crest when present is, on the evidence of the vase-painters, a ridge-crest of moderate height, but incapable of nodding. Only the tail which hangs down the back is capable of independent movement, which is not nodding but wagging.

metal or heavily armoured: *φαεινός, χαλκίης*, more rarely *χάλκειος, χαλκοπάρης*;¹ when it falls to the ground it clangs or rattles (*καναχήν ἔχε*). The negative evidence of proto-Geometric and Geometric graves in Greece justifies us in believing that on the mainland such helmets, if they existed at all, must have been extremely rare and probably confined to the end of the period. The same conclusion applies to Crete and to Assarlik, the only proto-Geometric site so far excavated on the Anatolian side, but it does not necessarily hold good for the *terra incognita* of Ionia. In the isolation of the Dark Age and after the Dorian invasion, enjoying a long immunity from external attack, the Greeks of the mainland can have fought only with each other, a circumstance which accounts for the primitive character of the warfare depicted on Late Geometric vases and notably for the exclusive use of the throwing-spear. Such a spear is necessarily much lighter than a thrusting-spear and therefore comparatively ineffective even if used for thrusting in an emergency. In Anatolia the settlers must have encountered strange foes and weapons, including the composite bow with the long range and high penetrative power of its arrows, which made strong defensive armour an imperative necessity for those who encountered them; we may recall the Bronze Age monuments which demonstrate the early use of the scale corslet in the Near East with this object (pp. 197-8). Tradition suggests that the Ionians found that the Carians, reputed the earliest mercenaries of the Aegean world, had something to teach them in the matter of military equipment, though it is not possible to say at what date this relationship begins.²

In the stock formula of the arming-scenes

κρατὶ δ' ἐπ' ἰφθίμῳ κινέην εὐτοκτον ἔθηκεν
ἱπποῦρι, δεινὸν δὲ λόφος καθύπερθεν ἔκασεν

(I' 336-7, O 480-1, Π 137-8, χ 123-4)

there is no mention of metal and the epithet *ἱπποῦρις* would suit equally the horned helmets of the Warrior vase and the typical Geometric helmet of the vase-paintings. The rest of the second line, however, is not applicable to either, for *λόφος* means the back of the neck or (cropped) mane of a horse and if used in its proper sense can only refer to a ridge-crest. It is true that the ridge-crest often combines the two features, inasmuch as it may be prolonged into a tail behind, the form regular on the Corinthian helmet, but attached as it is to the head-piece it cannot be said to nod. We have, however, towards the end of the Geometric age examples of a stilted ridge-crest with a long tail which might be said to do so; the stilt would add formidably to the wearer's height and exaggerate the

¹ *σάγχαλος* as an epithet of *κινέη* is confined to the *Οἰστύει* (σ 378, χ 102).

² It may be recalled that Chaka, the great Zulu chief of the mid-nineteenth century, raised his people from their insignificant and downtrodden position to that of a formidable and war-like tribe by bringing about the substitution of a heavy thrusting assegai for the light throwing-spear which had been their sole weapon.

movements of his head.¹ Such a *λόφος* would offer a good grip to an opponent at close quarters and sometimes appears in this rôle on proto-Corinthian vases;² but on Late Geometric vases we see warriors seize an antagonist by the plume (Fig. 12). The helmet of Paris therefore may have been of either sort (*P* 369 ff.); the incident is unique and so is the chin-strap which Aphrodite snapped to save his life. Unless it had cheek-pieces the top-heavy helmet with stilted *λόφος* would certainly need one, but so would the normal Geometric helmet *κρατάφοις ἀραρυῖα*.

Hector's helmet with its *λόφος ἱπποχαίτης* and further described as *ἱπποῦρις* (*Z* 469-70 and 495) is of the later class, to which the helmets of Agamemnon (*A* 41-2) and Achilles (*Σ* 611-12) also belong, inasmuch as they have *λόφοι*. They have additional features. That of Achilles is elsewhere (*T* 382-3, *X* 315-16) said to have had in addition to the *λόφος* golden *ἔθειραι* which wave on either side of it. There can be no doubt that the lines in *T* are an interpolation, borrowed with a trifling verbal alteration from *X*. They are lacking in a number of manuscripts and as Leaf, ad loc., points out, *περισσεύοντο* is appropriate in *X* where Achilles is running and not strictly appropriate in *T*.³ The *ἔθειραι* without *λόφος* would suit the plume of the earlier form of Geometric helmet; it is possible that *Σ* 611-12 displaced an earlier formula to make way for the *λόφος*. The only monument on which, possibly, the two elements are combined is the terracotta head from Samos mentioned above, and even here it is impossible to say with certainty that the transverse ridge behind which the strands start is a crest or could be called a *λόφος*. If a double decoration including *ἔθειραι* and *λόφος* came in after the *λόφος*, *X* 315-16 may have been added to describe the novelty. The lines do not suit either the Corinthian or the Attic crest.

This brings us to the question of the *φάλοι* and *αὐλῶπις τροφάλεια*. That *τροφάλεια* is an adjectival form with which *κόρυς σι κινέη* was originally understood and that it means 'a helmet with four *φάλοι*' is generally accepted, but the nature of the *φάλοι* remains obscure. It is true that in a duplicated passage (*N* 132-3 = *Π* 216-17) it appears to be made clear; they are metal (*λαμπεροί*) projections from the front of the helmet, probably from the back as well, which touch each other when the wearers, closely massed in depth, bend their heads. As early as 1883 Dennis identified them with the upright bar found on the helmets of warriors on a Clazomenian sarcophagus,⁴ and in the same year Leaf,⁵ accepting the equation, developed

¹ The crest which Meges detached with a single thrust of his spear must obviously have been stilted (*O* 535-8).

² H. Payne, *Nc.*, p. 95, fig. 29, 4; *B&A*, xlii, p. 100, fig. 9, c.

³ To his arguments may be added the fact that only here is *τροφάλεια* given the epithet *ἱπποῦρις*.

⁴ *JHS*, lv (1883), pp. 12 and 17, fig. 12, p. 11, and Pl. xxxi. On the plate the upright of the relevant helmet on the right has a single horizontal bar, that of the corresponding helmet on the left a pair; possibly a pair of uprights is intended. The helmet in Fig. 12 has something like the projection seen on some helmets on the Carchemish reliefs (p. 220, *supra*).

⁵ *Ibid.*, p. 294. In Anatolia, whence Mycenaean Greece probably derived them (cf. the

the view of Dennis and pointed to a far earlier example in what he took to be an unbroken series, viz. the horns of the helmets on the obverse of the Warrior vase. Furtwängler, who had noticed the article of Dennis, and Loeschke followed suit some years later, and finally, but independently, the thesis was developed by Reichel,¹ who further attempted to interpret *φάλοι* in terms of the *αἰλώπις* *τρουφάλεια*.

If the duplicated passage stood alone, there could be little doubt about the nature of the *φάλοι* and there are two others in which the same meaning would be appropriate, viz. Γ 361-3 and II 338-9, in both of which a sword in the act of delivering a blow is caught and shivered on the *φάλος* of a helmet. To turn such slashes was certainly a function of the projections found on various Bronze Age helmets; the all-metal helmet with cheek-pieces could and generally did dispense with them, but here and there they lingered as ornaments. As we have seen, their original home seems to have been in Anatolia; it is significant that in later days they are found principally in Ionian and Etruscan art.² That they had a vogue in Greece in LH III is suggested by the leaden horns from the King's Tomb at Dendra and the whole boars' tusks from Menidhi (*supra*, pp. 224-5 and 218, unless indeed these represent a provision for plating helmets) as well as by the Warrior vase, and it is natural that they should appear for the first time in the age of intensive Mycenaean settlement in Anatolia.³

In other passages, however, this rendering of *φάλος* is unsatisfactory if not impossible. In N 614 Peisandros attacks Menelaos with an axe:

ἦτοι δ' μὲν κόρυθος φάλον ἤλασεν ἱπποδασείης . . .
ἄκρον ὑπὸ λόφον αὐτόν.

The blow was ineffectual and we hear no more of it. The position of the *φάλος* in relation to the crest is not illuminated by any of our illustrations of horns, which are always situated well below the crest.⁴ This passage certainly suggested one of the explanations of the *φάλος* given by the ancient authorities, viz. that it is the stilt or holder of the crest. As a general explanation this will not do; it suits neither the passages we have

horned helmet of the Guardian of the Gate at Boghazkeni, Pl. XVI, 1), the *φάλοι* no doubt did continue in an unbroken series; but they were in all probability a complete novelty to the first settlers from Geometric Greece in Anatolia.

¹ *HW.²*, p. 98, n. 1.

² *Ibid.*, p. 108, fig. 45; Blinkenberg, *Lindiake*, ii-iv, p. 40, fig. 25, where an Ionian shard is reproduced on which helmets are equipped with realistically rendered horns and ears of oxen; this recalls the helmets ascribed by Herodotus (vii. 76) to an Anatolian contingent in Xerxes' army which combined a *λόφος* with similar decorations. The name of the contingent has unfortunately been lost; Stein suggests the Pisidians. The helmets on the shard have a further decoration of ostrich feathers.

³ If the heads of the faience fragment from Shaft-grave IV represent Shardians, this people may already have had that footing in Anatolia which the Land and Sea Raid indicates.

⁴ See the series figured by Leaf, *op. cit.*, p. 292. No. 15 (= *HW.²*, p. 108, fig. 46) is not relevant; it comes from the design on a bronze situla found in Carniola which is not earlier in date than c. 500. The Corinthian crest disqualifies it for use as an illustration of Homer.

examined nor yet those that remain, and, as has often been remarked, so subordinate an element as the support of the crest could not have given rise to two epithets, ἀμφίφαλος and τετράφαλος. It is possible, however, that it was the meaning ascribed to φάλος by the author of these lines.

Neither explanation will serve in the remaining passage (*A* 459-61 = *Z* 9-11) in which φάλος appears. Here a thrown spear hits the φάλος and penetrates to the forehead. Obviously the φάλος cannot here be either the crest-holder or one of a pair of horns; it might conceivably be such a conical projection as we have seen represented on helmets in Minoan-Mycenaean art (*supra*, p. 220) and on those of the marching warriors of Carchemish, which would have the advantage of keeping the general meaning of 'projection'. More probably, however, we have here another misunderstanding of φάλος, an adjunct unknown to the Greek helmet of the Geometric age. We may suspect that it is confused with φάλαρον and denotes a metal disk (such as those found in north Italian graves of the early seventh century),¹ plating the front of a helmet which probably had four and was therefore properly called τετραφάλῃρος. Two helmets, those of Athena and Agamemnon (*E* 743 = *A* 41), are so described and also have the epithet ἀμφίφαλος; this presumably better-informed bard did not therefore confuse φάλος and φάλαρον. τετράφαλος occurs again (*M* 384) applied to the helmet of a quite undistinguished follower of Sarpedon. There is no reason why it should not in this case mean 'four-horned'. Apart from demonstrable interpolation Agamemnon's equipment is decidedly modern, as the two throwing-spears show, and it may seem unreasonable to postulate so antiquated an epithet as 'two-horned'; yet in ἀμφιβρότη the shield preserves one probably even more ancient and no less inappropriate. Our evidence for horned helmets before the end of the eighth century comes entirely from the Bronze Age,² but the poet may have liked the heroic appendage and may have seen something similar in use by Ionia's neighbours.

It remains to discuss Reichel's conjecture respecting the meaning of αὐλώπις, viz. that it describes a helmet with tube-like projections in front, like those possessed by the snail or, according to Reichel, by the fish known as αὐλωπός or αὐλωπίλας. The passage in which Oppian describes the αὐλωπός³ defies exact translation and the fish eludes identification; it is

¹ See Dolan, *Italic Tomb-groups*, p. 10, and the concluding chapter on chronology. That such a plate could be pierced by the cast of a spear is improbable; the couplet in question may be the work of a later hand.

² The two-horned helmet is illustrated by the pair of leaden horns from the King's Tomb at Dendra and by the Warrior vase, the four-horned by the sherd from Mycenae (*HW* 3, p. 107, fig. 44) and by the contemporary Shardian helmet. The 'Captain of the Blacks' of the Knossian fresco wears a goat-skin cap with the horns attached (*P. of M.* ii, pl. xiii).

³ Hal. i, 255-8. Aelian, who gives an intelligible account of the creature (*N.A.* xiii, 17), merely says of its eyes τοὺς μὲν ὀφθαλμοὺς ἔχειν ἀνιστάτους καὶ περιφερεῖς καὶ μεγάλους, οἷους Ὀμφος τοὺς τῶν βοῶν ἶδει. Among other conjectures it has been proposed to identify it with some variety of the tunny or dolphin.

plain, however, that it is not a stalk-eyed crustacean. It is the Scholiast who compares these with the αὐλωπίες: τοὺς ἔχοντας μεγάλους ὀφθαλμοὺς δίσκην αὐλῶν, ὅποιοί εἰσιν οἱ τῶν παγούρων καὶ ἀστακῶν. This does not prove or even suggest that crabs and lobsters were ever called αὐλωποί, and without this equation Reiche's term of comparison is gone; it is much more probable that both αὐλῶπις and αὐλωπός represent Greek efforts to reproduce a non-Greek word. None the less, *τροφάλεια* in all probability means 'helmet with four horns' and its incomprehensible epithet¹ reinforces its claim to antiquity. It is frequently described or alluded to as of metal or heavily plated. This does not indeed dispose of its claim to go back to the Bronze Age, but it is impossible to show that the poet attributed to it any consistent or distinctive form. In the Paris episode it has a chin-strap; in *N* 577, however, it is knocked off by a blow from a sword without any reference to a strap. When Apollo strips Patroklos of the armour of Achilles (*II* 793 ff.) he begins by similarly knocking off the helmet, which is first called *κυνέη*, then αὐλῶπις *τροφάλεια*, and finally *ἱππόκομος πύληξ*. In *N* 527-30 the *πύληξ* is again identified with the αὐλῶπις *τροφάλεια*, and here as elsewhere its metallic quality is emphasized. It rocks about Hector's temples, suggesting that it is *κροτάφοις ἀραρυία*: no λόφος is mentioned in connexion with it. Like the other forms of helmet, it appears to have no neck-guard; a sword-slash takes off head and *πύληξ* together (*Y* 481-2; cf. *E* 465 and *O* 451). A fresh detail comes from *II* 104-6 where, worn by the retreating Aias, it is battered by missiles *κατὰ φάλαρα' εὐποίηθ'*. The ancients had no authentic tradition regarding *φάλαρα*,² a *ἅπαξ λεγόμενον* in Homer, which they confused with *φάλος*. Its use in later Greek to denote the metal-plated cheek-pieces of a horse's head-stall led them, however, to include among others the correct interpretation, viz. metal plates, and also misled them into the explanation *παράγναθίδες*; the *πύληξ* is never called *χαλκοπάρης*. That the adjective *τετραφάλῃρος*, accorded only to the helmets of Athene and Agamemnon, contains the same root and means 'having four *φάλαρα*' is clear from the later adjective *φάλᾶρος* used to describe a dog with a white patch on the forehead³ and above all from *φαλαρίς*, the name of the Bald-headed Coot chosen to describe the bony plate above the beak. *φαληριόωντα* applied in the *Iliad* to stormy waves patched with white foam also comes from the same root.

Though the names and epithets are various, certain common characteristics of the normal Homeric helmet emerge. The absence of a neck-guard has been noted; that the face was also left exposed is made clear by the

¹ The epithet αὐλῶπις occurs four times in Homer as an epithet of *τροφάλεια*, always in the singular. In *A* 350-3 Hector's *τροφάλεια αὐλῶπις* has an outer surface of bronze; as it is *ερίπτυχος*, it had three layers of which one was presumably a leather lining. In *N* 530 and *II* 794-5 the metallic clang of the helmet as it drops on the ground is emphasized; in *E* 181-3 Pandaros identifies Diomedes by his shield and *τροφάλεια αὐλῶπις* as well as by his horses.

² For a full discussion of *φάλος*, *φάλαρα*, *φαληριόωντα* see Buttmann's *Lexilogus*.

³ Theocrit. viii. 27.

statement in *Π* 793-9 that the helmet (called *κυνέη*, *τροφάλεια* and *πήληξ*) was designed to protect the head and forehead of the wearer; moreover, head and face wounds below the level of the eyebrows are frequently inflicted without any mention of the helmet, a reference to which could hardly have been omitted if it had covered the part affected.¹ This agrees with what we know of the Geometric helmet, for though cheek-pieces begin to appear towards the close of the period, the faces on the Tiryns shields are exposed. Even within the limits of the eighth century, however, there was probably some infiltration of metallic and other terms (*χαλκείη*, *χαλκοπάρηος*, *λόφος*); in one instance it even seems possible to detect the process. In *Α* 95-8 a wound is dealt in the forehead through the plated rim (*στεφάνη χαλκοβάρεα*)² of an unspecified helmet, within which the brain is spattered. The wound is dealt by the spear of Agamemnon himself, at close quarters, a by no means impossible feat; some of the bronze greaves and shield-blazons found in the recent excavations at Olympia exhibit slits which are stated to be the result of blows sustained in action.³

In *Υ* 395-400 a similar incident is narrated, partly in the same language; evidently the author took *Α* 95-8 as a model. Again a helmet, this time described as *χαλκοπάρηος*, is penetrated by a spear-thrust, a business elaborated in two lines, after which the tale is concluded by the final line and a half of *Α* 95-8. *χαλκοπάρηος* is a strictly relevant epithet, for the cheek-piece should normally have resisted a blow on the temple; the spear, however, is the *Πηλιάς μελήη* (277) wielded by Achilles himself. The episode is well conceived, for the catalogue of Achilles' victims must not degenerate into a mere list; the feat is worth emphasizing for itself and the slain man has some importance as the son of Antenor. The execution, however, is indifferent; *χαλκείη*, in itself a suspicious epithet, should not follow so closely on *χαλκοπάρηος*. The passage apparently became a stock one, for it appears with much less justification in *Μ* (183-6) and with the inferior reading in the vulgate of *χαλκείη* instead of *ιεμένη* after *αίχμη*. Here the helmet is pierced by a thrown spear, which is probably impossible, and slayer and slain are alike unimportant. The addition from *κυνέης* to *πεπάλακτο* can be very simply removed; all that is necessary to

¹ Reichel collected a number of passages of which the principal are *Δ* 502, *Ε* 584, *Ν* 615, *Π* 740 (temples and forehead below the helmet rim), *Α* 109, *Υ* 473 (ear). There is also a number of cases in which the neck is wounded below the jaw or below the jaw and ear, a region which would have been protected by the Corinthian, Cypriot, and Illyrian helmets of the early seventh century found together in the recent excavations at Olympia (*Jb.* lii, 1937, *Olympiabericht*, pls. 6-10, and pp. 52 ff.; cf. *Ol.* iv, p. 62, no. 1031, and p. 172). The upper part of the forehead is protected in *Δ* 459-60 and *Ζ* 9-10, whatever the meaning of *φόρος* in these passages.

² The rare word *στεφάνη* is commonly taken as meaning 'helmet', but there is no evidence that it ever had this sense except the passage in *Κ* (30-1) where it is undoubtedly so used; it is also there called *χαλκείη*. *Κ* is not a good authority, and its author probably misunderstood the two authentic instances in the *Iliad*, that under discussion and that in *Η* 12, in both of which the natural meaning 'rim' or 'ciclet' is more pointed.

³ *Jb.* lii (1937), *Olympiabericht*, p. 52.

restore the metre is to give an augment, admittedly rare, to δάμασσαν and a metrical lengthening to the preceding syllable.

The only remaining instance of χαλκοπάργος in the *Iliad*¹ occurs in a passage (*P* 294-7) which gives a vivid account of yet another head-wound dealt through a helmet. The Greater Aias strikes his man at close quarters, and the great spear, driven by his mighty hand, crashes through the helmet, which is called first *κυνέη χαλκοπάργος* and then *κόρυς ἱπποδάσεια*; the brain issues *παρ' αἰλόν*. There is nothing here at variance with epic usage except the epithet *χαλκοπάργος*, which is, however, a vital point, enhancing as it does the prowess of Aias; its presence, however, has led to the mistaken interpretation of *παρ' αἰλόν* as 'through the vertical opening between the cheek-pieces of the helmet'.² The words can only mean 'past the socket' of the spear-head; the sense is excellent, and *αἰλός*, a natural term for a socket, actually occurs with this meaning in the compound adjective *δολύχαιλος* applied to the *αἰγανέη* in the *Odyssey* (ι 156). The only positive objection to the interpretation is that in all other cases where the socket is mentioned in the *Iliad* it is called *καυλός*.³

The predominantly metallic character of the Homeric helmet is probably to be ascribed mainly to the gradual adjustment of the text, first when the practice of plating became common and later when the all-metal cheek-piece helmet became universal. The alternative hypothesis that the metallic formulae or some of them survived from the Bronze Age is far less probable, and it may be noted that the most striking allusions to metal helmets are apt to occur in suspicious surroundings.⁴ With the partial exception of *κυνέη*, none of the Homeric names passed into later Greek;⁵ the fact suggests that a general change took place at about the time when the epic tradition closed, though apparently rather earlier than the introduction of the hoplite phalanx.

All the Homeric names are of unknown origin. *κόρυς* is presumably connected with *κάρα*, *κάμηνα*, and is also associated with a group of words

¹ There is one example in the *Odyssey*, ω 323.

² *αἰλός* in Homer elsewhere means 'flute' except in χ 18, where it is used of a jet of blood issuing from the nostrils. It is quite inappropriate to a gap between two thin surfaces. A slightly more plausible explanation, which does not seem to have been offered, is that it is one of the eyeholes of the Corinthian helmet, which would have some resemblance to the end of a tube, but the interpretation is far-fetched.

³ *N* 162, 608, *Π* 115, *P* 607. See Ebeling, *Lexicon Homericum*, s.v., for the scholia on the question whether the *καυλός* is the socket or the part of the shaft inserted in it; the question is settled in favour of the socket by *Π* 115-16.

⁴ Thus *N* 341 and *T* 359 occur in what may be called 'hoplite' interpolations, as the plate-corsets of the neighbouring lines betray. Two helmets are called *πύργαλοις* in the *Odyssey* (ε 378 and χ 100); by that date the all-metal helmet was probably a fairly familiar object. Whether the accompanying description as *σποράφοις ἀμυρεῖν* is compatible with the adjective is another matter.

⁵ Herodotus uses *κυνέη* exactly as he uses *σπάρτος* which elsewhere supplanted it, which suggests that the word may have survived in Ionic; it even occurs once in Attic (ps.-Demosth. lix. 94, where it is used to describe the apparently distinctive head-gear worn by the Plataean contingent at the battle of Marathon).

beginning with *κορ-* and all containing the idea of 'head' or 'top': *κορυδός*, *κορύπτειν*, *κορυφή*, &c.¹

The use of *κορύσσεσθαι* for 'to arm' attests its early appearance in epic, when shield and helmet were the warrior's sole defence; *θωρήσσεσθαι* is more frequent in the same sense and was probably ousting the older expression. *κινέη*, regular in the arming formula, is used in the *Iliad* only in the singular; in the *Odyssey* it occurs twice in the plural in a single passage. Though the derivation from *κύνων* is, philologically speaking, irreproachable, it has never gone unquestioned and is in the highest degree improbable. That the *κινέη* is variously described as *κτιδέη* (*K* 335), *αίγείη* (*ω* 231, where it is a civilian cap), *χαλκήρης* (*Γ* 316, *Ψ* 861) does not of course constitute an argument against its having originally denoted a helmet made of dog-skin, but why so improbable a material should be used by a people who normally employed ox-hide for such purposes remains unexplained.

The only interest of *καταΐτυξ* (*K* 258) lies in the name. The unadorned leather cap is dateless; it was presumably worn in real life by the originals of the fairly numerous warriors who on Geometric vases lack plumes. The non-Greek name, however, and the neighbourhood of the passage concerning the boar's tusk helmet suggest that the *καταΐτυξ* also was an article belonging to the remote past. The Cretan opinion recorded by Herodotus that helmet-crests were invented by the Carians reminds us that some Cretan helmets were crestless and suggests that one such form may have been called *καταΐτυξ*.

The collection and investigation of the data, archaeological and literary, which concern the helmet have been a laborious and possibly futile task. Fresh illumination may yet come, however, from excavation, and with that prospect in view a preliminary sifting of the available material became an imperative if tedious duty. It is obvious that elements of many different dates are involved and figure in a record which we are unable to read. That in the one instance of the boar's tusk helmet a seventh-century poet has been able to preserve an identifiable description of an object which did not survive the Bronze Age sheds on the transmission of heroic poetry a ray of light which may yet be amplified.

Ζωστήρ *ἄνω μέτρη*

No satisfactory explanation can be found for either *ζωστήρ* or *μέτρη*. It is possible that the words denote the same article, for each is, or includes, a girdle (since *ζωννύσκειτο* is used with reference to the *μέτρη* in *E* 857). Further, to all appearance they protect the entire abdomen and cannot, if

¹ Bechtel's view (*Lexilogus zu Homer*, s.v.) that *κόρυς* is connected with *κοῦρος* and originally meant the equipment of a fighting man has nothing to recommend it. It cannot be justified by the general sense acquired by *κορυαίης*, *ἐπικορυσστής*, *χαλκοκορυσστής*, with which we may compare *αἰχμητής*, *δομιστής*.

that is so, be belts in the ordinary sense. There is no detailed description of either, but epithets show them to have been of metal or well plated.

For this there is no archaeological parallel in the Aegaeon area at any period, nor indeed are there remains of any girdle plated to serve as armour. Neither the Shaft-graves nor the King's grave at Dendra nor such a well-furnished tomb as the Chieftain's at Knossos have yielded any trace. The characteristic Minoan belt used to support the loin-cloth is an article of everyday use, untraceable in the cemeteries and therefore presumably unplated; moreover, it sits too high to protect the abdomen.

The broad, girdle-shaped metal plates characteristic of Italy in the Early Iron Age¹ would fulfil Homeric requirements very well, for some at least of them are broad enough in front to cover the abdomen. None is long enough to meet round the waist; presumably they were mounted on leather and must have fastened behind. They have, however, no connexion with the Aegaeon area; with the exception of three specimens found in Prussia, which they can have reached only by way of trade, and a single specimen in the Louvre of unknown provenance, once wrongly attributed to Euboea, possibly in fact from the Basilicata, the whole considerable series comes from sites distributed over Italy from Este to Rome.

The proto-Geometric and Geometric graves of the mainland and Crete which have been noted as containing weapons but no remains of corslet or helmet (Athens, Halos, Vrokastro) also lack remains of plated belts. Towards the end of the period, however, evidence becomes available that a waist-belt was worn to support the short sword, which in the vase-paintings always appears as closely attached to the figure at waist-level. The silhouette style denies us all knowledge of its shape, but a bronze figurine of a young warrior² otherwise nude wears a broad girdle of ordinary shape at waist level. His nudity is 'ideal', but it will be noted that such a belt is totally incompatible with the plate corslet, which cannot have been present to the artist's mind. Here, therefore, we have evidence of the use of a belt, possibly plated, which does not appear on the Warrior vase or other Mycenaean monuments and which was necessarily discarded when the plate corslet came in.

On this remarkable figurine, which measures 22.5 cm. in height and belongs to the first half of the seventh century, fresh light has been thrown by the discovery in the later excavations at Olympia of a series of similar figures running from the seventh to the early sixth century, one of the earliest of which is reproduced on Pl. XII, 4. It will be noted that the

¹ *BPI.*, 1908, pp. 100 ff.; cf. *HE.*, pp. 289-90, figs. 106-8. For the list of find-spots see *BPI.*, p. 106, n. 5, and cf. Déchelette, *Manuel d'Archéologie préhist.*, II, 1, p. 434, n. 3. Pigorini (*BPI.*, loc. cit.) points out that these girdles are spread over a considerable period of time and an area which embraces the Villanovan, Veneto-Illyrian, and the Etruscan cultures.

² *AM.*, xxxi (1906), p. 219, pl. xviii. That the figure represents a warrior is clear; he wears a helmet without cheek-pieces and with a tall, forward-curving crest; in his raised right hand he once held a weapon, presumably a spear.

belt is broad enough to cover the navel and is ribbed in a way which suggests plating. Though there is nothing to mark these beardless youths as other than human, it is difficult in view of the hieratic and rigidly traditional style and of the provenance to resist Emil Kunze's conclusions that they represent a deity and that that deity is Zeus in the character of warrior.¹ That the figurines represent an older tradition can hardly, if we consider their archaic character, be doubted; the figurine of the earlier excavations has generally been classed as Geometric. It is in the second half of the eighth century that we may look for the fusion of Anatolian deities and of the beardless Zeus of Crete with the Sky-god of the mainland.²

A series of short metal aprons found in Crete, where they also occur in the form of miniature votives,³ and at Olympia⁴ were apparently meant to protect the abdomen; no other possible use has ever been suggested for them and they have often, if rather casually, been identified with the *μῆτηρ*. To this there are serious objections. None can be shown to be earlier than the seventh century; the miniature examples from Praesos were associated with miniature hoplite shields and plate corslets. No trace of a supporting girdle was found with any specimen, large or small, and any such is indeed excluded by the plate corslet; the rings with which the upper edge of some is furnished would serve equally well for suspension under the outstanding rim of the plate corslet. They suggest in fact yet another of the experiments in defensive armour for the hoplite of which the *παπαμηρίδιον* appears to be a certain example.⁵ Further, the device appears to be limited to Crete, where it may have been suggested by the fact that a girdle strong enough to support the loin-cloth was still in ordinary wear.

That both *ζωστήρ* and *μῆτηρ* are intruders into the older epic tradition may fairly be inferred from the fact that neither is mentioned in any one of the arming scenes, but they are not like the plate corslet 'hoplite' interpolations, inasmuch as the plate corslet, reaching to the hips, excludes the use of a girdle.⁶ It is time to examine the Homeric data in detail. Though not of I-E. origin, the root of the word *ζωστήρ* is well established in Greek, *ζώνη* and *ζώνησις* being common to all periods. In the *Iliad* mentions of the article are fairly numerous and well distributed, occurring in Δ, Ε, Ζ, Η, Κ, Α, Μ, Ρ, and Υ. Sometimes it is of metal or metal-plated,

¹ *Antike und Abendland*, Bd. II, pp. 101 ff.

² *BSA*, xxxvii, pp. 178 ff. The crude Kardhiza figurine (v. *supra*, p. 128), which wears a similar belt, may also represent a deity; but the Mantiklos of the inscribed figurine from the Tyszkiewicz collection, who wears his belt extremely low, leaves us in no doubt of his purely human status. See Lamb, *Gr. and R. Bronzes*, pls. xvii b and xx x and pp. 43 and 74.

³ *Ibid.*, pp. 68-2, fig. 3. For the miniature votives see *BSA*, viii, pl. 2, and p. 258.

⁴ *Ol.* iv, pl. ix, no. 585, Textb., p. 158.

⁵ *BSA*, xlii, p. 133.

⁶ It is difficult to say what Herodotus meant by the *ζωστής* of the corslet worn by Sophanes at the battle of Plataea (ix. 74); presumably it was the narrow band in which the fifth-century corslet (no longer of the *γυαλός* type) terminated above the *πρόπυγες*; see *MuZ.* 524, for a typical instance.

being called *παναίολος* in *A* 186 and 215 and in *A* 236; in 237 it is described as of silver. Yet this notable piece was not mentioned when Agamemnon armed himself, scarcely 200 lines earlier in the book. Twice, however (*Z* 219, *H* 305), it is said to be *φοίνικι φαεινός*, which suggests leather; this reminds us that although in the *Iliad* it is regarded as a piece of military equipment, it was also an article worn in everyday life, simply to confine the chiton when active exertion was called for.¹ On such belts young men must have carried the short swords of the Geometric vases.

In the chapter on the corslet the conclusion was reached that before the end of the Iron Age a leather jerkin called *θώραξ* was worn in battle. Over this the sword-belt must have been worn, giving for the part it covered a double protection, and it is therefore possible that the passage in *Y* (413-18) is more or less in order. Achilles hits the fleeing Polydoros *μέσσον*, in the back:

ὄθι ζωστήρος ὄχῃς
χρόσκειοι σύνεχον καὶ διπλὸς ἦν τετο θώραξ.

The point comes out rather lower, *παρ' ὀμφαλόν*, as is natural, since the course of the spear would necessarily be downward; it encounters no opposition, as it must have if there had been in front a metal plate or apron covering the abdomen. In that case the fact that the *ζωστήρ* is said to fasten behind would have been explained, though the wearer could not have fastened it himself and no hero is described as needing help in putting on his armour. The point must be left obscure.

In the Wounding of Menelaos the line and a half recur, but this time the fastenings are in front and through them Menelaos is wounded. It may be that this is the original passage rather than that in *Y*; or the formula may have been current in contemporary heroic poetry, which was probably readier than epic to admit descriptions of contemporary practices and may have been borrowed independently. That the older tradition recognized no protection for the region concerned seems certain from the number of cases in which a man is wounded in it without mention of any (*A* 525, 531; *N* 568, *Φ* 180).

Thrice, however, a man is said to be struck *ρείαρῃ ἐν γαστρὶ* by a spear which has penetrated the *ζωστήρ* (*E* 539 and 615, *P* 519).² If the phrase means, as it is commonly supposed to do, the 'nethermost' belly, then there is only one piece of armour known in the Aegean area which could have intercepted such a blow, viz. the seventh-century bronze aprons of Crete. It may be doubted, however, if the translation is correct. It is no doubt difficult to separate *ρείαρα* from *ρεός* (literally, low-lying ground as opposed to mountain slopes and hence 'arable') or from *ρεῖαρος*, whose all but invariable meaning in Homer is 'lowest'. *ρείαρα* is not, however, a

¹ § 72. Hesiod, *Op.* 345. In *K* 77 Nestor's *ζωστήρ* lies ready with the rest of his equipment; quite properly he does not put it on when he goes to the council (131 ff.).

² *E* 538-9 = *P* 538-39. In each of the three cases the spear is thrown; in the repeated couplet it is said to pierce the shield before reaching the *ζωστήρ*.

superlative in form and its translation as if it were is unjustified. Since it is known only as an epithet of γαστήρ, it must be supposed to denote a constant quality; νεῖαιρα γαστήρ may mean 'the belly which forms the lower part of the trunk', a phrase comparable in some degree to πόδες καὶ χεῖρες ὑπέρθεν.¹

This is at any rate the meaning attributed to it by Scholl. BT on *E* 539: τῷ παχεῖ ἐντέρῳ ἢ τῇ κύστει, with which we may compare Pollux ii. 209: κόλον ἢ κάτω κοιλίαν, ἣν νεαίρην Ὅμηρος καλεῖ.

Schol. A, however, gives on the same line ἐσχάτη, 'remotest', i.e. the back of the belly, the part remotest from the point of entry of the spear; the wound goes through to the backbone. It looks as if at some point an ancient commentator had realized the difficulty of imagining a girdle which covered the abdomen. The sense obtained is excellent, but the question of the superlative remains.

The same problem confronts us in the case of the μίτρη. Unlike ζωστήρ, μίτρη is an isolated loan-word, alike in Homer and in later Greek. Except in epic it has no military associations, though it retains the meaning of 'girdle' in the specific sense of 'maiden girdle'.² All through it preserves its essential meaning of 'strip' or 'band' and is mainly used with the sense of 'head-band'.³

In Homer it is mentioned only in *A* and *E*. In the latter book (857) Ares is wounded

νεῖατον ἐς κερεῶνα ὅθι ζωνεύσκετο μίτρη

and an otherwise unknown Boeotian is called αἰολομίτρης (*E* 707).

Whatever the meaning of νεῖαιρα γαστήρ, it would seem that νεῖατος κερεῶν can have only one. νεῖατος is incontestably a superlative and both etymologically and by usage appears to mean 'lowest'. The phrase occurs elsewhere (*A* 381, *II* 821) to describe a wound, real or imaginary, sustained εἴθε μάλιστα | γέγνηε Ἀρης ἀλεγαινός οἰζυροῖσι βροτοῖσιν. It looks as if in *E* 857 it had merely been unintelligently borrowed. There is, however, another superlative, regarded by most, though not all, philologists as distinct from νεῖατος and connected with νέος, viz. νεώτος whose invariable meaning in Homer is 'last', 'extreme', ἔσχατος. Generally speaking, the distinction between the two forms is strictly observed, but in the last days of epic νεῖατος is beginning to take on the meaning of νεώτος in addition to its own. *η* 127 furnishes a certain, *Θ* 478 a probable example; it may be that *E* 857 supplies a third, i.e. the bard wished to express κερεῶνα διαμ-

¹ That, according to a generally accepted emendation, a contracted form νεῖα is used substantively in *Agamemnon*, 1479, supports this view.

² In *AP*, xv. 44 it appears to mean the girdle with which the dead charioteer confined the long chiton of his calling; there is no justification for the meaning of 'wrestler's girdle' given in L. and S., s.v.

³ There is no reason to think that in Herodotus it ever means 'cap' or 'turban'. 'Head-band' is the natural meaning in i. 195, and also in vii. 62, where the Kissini are contrasted as μίτρηφόροι with the Persians, who wear πελάς; and it is quite appropriate in vii. 90.

πέρης of *E* 284, which did not suit the beginning of the line.¹ So Schol. B as a second explanation: κατὰ τὸ ἔσχατον τῆς λαγόνος ἦτοι ἐνδότατον.

Into the Wounding of Menelaos the *μίτρη* introduces intolerable confusion; if all mention of it is removed, the narrative becomes intelligible, though the text is not completely restored. The arrow goes first through the *ζωστήρ*, then, quite properly, through the *θώραξ*; the line is, however, open to suspicion, since it is certainly interpolated in other contexts. Next come *μίτρη* and *ζῶμα* in a couplet (*Δ* 137-8) which can be removed without injury to the context and should perhaps be accompanied by 136, the line of the corslet. As Menelaos was wounded through the fastenings of the *ζωστήρ* we must suppose that he was wounded in the waist or very slightly lower, but on this point we are not informed. Lines 187 and 216 couple *μίτρη* and *ζωστήρ* and tell us that the former was made by smiths, which agrees with the epithet *αἰολομήτρης* already noted. *ζῶμα* can only mean 'loin-cloth' and thus associates the *μίτρη* with Crete. If it is, as it seems to be, merely the girdle which suspended the loin-cloth plated for military purposes, then it is to all intents and purposes identical with the *ζωστήρ* of the other Greeks; but the interpolator who inserted it in the Wounding of Menelaos apparently did not know this, unless indeed, like the interpolator of the Gorgoneion in the account of Agamemnon's shield, he aimed at ousting the authorized version. In that case some later hand must be responsible for having woven 187 and 216 into the metrical structure, so that mere excision is impossible.

That at some time in some region and for some people the *μίτρη* had a real importance is proved by the epithet of the comrades of Sarpedon *ἀμτροχέτωρες* (*Π* 419); it is probably no accident that not much later (465) one of them is killed by a wound *ρειαίρη ἐν γαστρί*. It is easily conceivable that at many periods Cretans may have met Lykians in battle and noted the difference in their equipment.

5. LEGGINGS AND GREAVES

No metal greaves of Bronze Age date have occurred in Greece. So far as is known at present, they first appear in conjunction with the hoplite shield, plate corslet, and Corinthian helmet, and are first recorded on the proto-Attic Hymettus amphora in Berlin, dated to c. 680 B.C. and on a proto-Corinthian aryballos from Perachora.² It is therefore generally held that *ἐνκερήμυδες*, which occurs some 40 times as an epithet of the Achaeans in Homer, is late and intrusive. It may be noted, however, that there is a solitary example of Bronze Age metal greaves from the outskirts of the Greek world, the often-quoted pair from a Mycenaean grave at

¹ See W. Schulze, *Quaestiones Epicae*, pp. 467-8; van Leeuwen, *Enchiridion Dictionis Epicae*, p. 246; Bechtel, *Lexilogus*, s.v. *verēs*.

² *Jb. ü* (1885), pl. v; *BSA*, xlii, p. 93, fig. 7.

Enkomi (Fig. 29).¹ By itself it of course proves nothing about usage in Greece proper. Presumably it was of local manufacture, but it reproduces in metal the Mycenaean legging and thong presently to be described. Not until the seventh century do we find with the rest of hoplite equipment the greave which depends on the spring of the metal to retain its place. The bronze cheek-piece from Ialysos which lay unremarked for half a century and the bronze helmet from Dendra² warn us not to assume dogmatically that metal greaves were wholly unknown in the Third Late Helladic period in Greece. That they were still unknown there in the early part of the fourteenth century is made fairly certain by their absence from the King's Tomb at Dendra.



FIG. 29

On the assumption, however, that they remained unknown throughout the Bronze Age, we may note that leggings, probably of leather, possibly of felt, were regular in LH III,³ at any rate in its later phase. They are plainly depicted on the Warrior vase and stele and on two LH III sherds from Mycenae;⁴ they are possibly worn by the bull-leaper on the fresco from Tiryns⁵ and certainly by the falling warrior on the frieze from the megaron of Mycenae (Pl. XII, 3). In this last case the white colour of the leggings and the projection to cover the knee which also characterizes the metal greave of the classical period (but not the bronze legging from Enkomi) suggest that they are of metal. The thongs, coloured dark brown, which are wound round the leg immediately below the knee and above the ankle, seem at first sight inappropriate to metal greaves. The Enkomi greave, however, was laced up the back with a bronze wire which may have been wound above and below as in the fresco; it would rest on the greave and not come in contact with the bare flesh. The question must remain open; in any case the colouring is unique.

The same evidence or lack of evidence which led us to exclude the bronze corslet from epic naturally applies to the metal greave. There is no reason to suppose that the leggings of the LH III monuments went out of use

¹ *Exc. in Cyp.*, p. 16, fig. 26; cf. Tomb 15 on p. 51. Only one of the pair is fairly complete.

² *ib. supra*, p. 226.

³ For the somewhat problematical *Gamaschenhalter* or gaiter suspender of the Shaft-graves see note at the end of the section.

⁴ Pl. XII, 1 and 2.

⁵ Schliemann, *Tiryns*, pl. xiii. The thongs wound round the leg above the knee and above the ankle resemble those of the megaron fresco from Mycenae, but the legging is not distinguished from the flesh, as it is in all the other examples, and may not have been there in the artist's imagination. The painting is strongly under the influence of Minoan models, and the thongs probably serve the same purpose as those which a Cretan bull-leaping girl wears round ankles, wrists, and hands to give support to the muscles (*P. of M.* iii, p. 216, pl. xxi).

any more than the leather jerkin; they are worn, perhaps with metal adjuncts, by the figures on the Idaean Hunt shield¹ whose equipment, it is true, has a strong Asiatic tinge.

The gaiter must have been a distinctive feature in the motley hosts who took part in the warfare rife in the eastern Mediterranean regions in the thirteenth and early twelfth centuries. It is not worn by the Egyptians or by any of their foes who appear on their monuments: nor yet, by way of confirmation, by the Griffin-slayer on the mirror-handle from Enkomi. If it was indeed the Achaeans (unfortunately not represented on Egyptian monuments) who accompanied the Libyans on their invasion of the Delta, they would be readily distinguished by this alone from friend and foe alike. That the Achaeans called their leggings *κημίδες* there seems no reason to doubt; the leather pair worn by Laertes on his farm is so called.² There seems to be no reason why the Achaeans should not have acquired in the Bronze Age an epithet calling attention to the article which distinguished them from every other contingent on the field of battle.

It is true that, as Robert points out,³ *ἐκνήμιδες* made its way in the text to some extent by substitution; thus in three cases (*H* 385, *Ψ* 272 and 658) a variant more appropriate in the context is recorded, viz. *ἀριστῆες Παρυχαίων*, and the same substitution or that of *ἀρήϊοι νῆες Ἀχαιῶν* might be made with advantage in other passages without any warrant from the manuscripts; such are *A* 17 and *I* 86. If, however, the adjective was established in the heroic tradition because in the Bronze Age the leather gaiter had made the Achaean on the battlefield identifiable at a glance, there is no point in seeking to oust it altogether. That it may have encroached in the seventh century is probable enough, for the flashing metal greave must have been a conspicuous feature of the hoplite phalanx, especially as it marched in step.⁴ *χαλκοκήμίδες*, which occurs once and once only (*H* 41) as an epithet of the Achaeans, is in a different case. If it refers to the hoplite greave, it is a substitution, presumably of the seventh century, though there is no apparent reason why the intruder should achieve a lodgement here and here alone. The line in which it occurs is essential and must stand; the epithet may have displaced *μέγλα πνείοντες* which would be quite in place. Once hoplite armour had come in, it would be in no danger of removal, while it could not encroach on the sphere of *ἐκνήμιδες* because it is not a metrical equivalent.

¹ Pl. VIII, 1. Cf. the gaiters worn by a pair of soldiers on enamelled bricks from Pazarli, a Phrygian site excavated by the Turks, in conjunction with a remarkable form of puttee protecting the thigh (*At.*, 1939, p. 142, fig. 25). Another group of soldiers wears hoplite greaves (Hamit Kosay, *Les Fouilles de Pazarli*, Ankara, 1941); the subject may be a battle between Greeks and Phrygians. The date of the bricks is supposed to be in the late seventh or even the early sixth century.

² *ib.* 228-9.

³ *Studien zur Ilias*, p. 46.

⁴ Cf. Polybius, xi, 9, for the views of Philopoemen on the importance of keeping equipment bright; *μεγάλα γὰρ μὲν εἶδη τῶν λαμπρότητα συμβάλλουσιν ἀπὸς ἰσχυροῦ τῶν ἐκτακτῶν*. He mentions the greave specifically.

In the original form of the arming-scene leather gaiters may have played their part; if so, however, the ensuing line (*καλῆς, ἀργυρέουσιν ἐπισφύριοις ἀραυρίας*) is probably a later addition, since in LH III gaiters seem to have no appendages. On the other hand, the line cannot apply to the hoplite greave, which has nothing attached to it, as countless representations and a considerable number of actual specimens suffice to demonstrate. It ends above the ankle and rests on a soft circular pad which is sometimes represented in red-figured vase-painting.¹ Furtwängler found at Olympia and identified with the *ἐπισφύρια* of Homer ankle-guards, or rather combined heel-and-ankle guards, which would have averted the doom of Achilles.² The suggestion cannot be maintained, for the guards were obviously not attached (as *ἀραυρίας* implies that the *ἐπισφύρια* were) to either greave or gaiter. They represent one of those experiments in protective armour like the *παραμηριδίων* and the arm-guard which were tried after the adoption of hoplite armour, presumably in the seventh century. A possible representation of *ἐπισφύρια*, somewhat doubtfully Hellenic, occurs on the Idaean Hunt shield, where the gaiters of the armed figures are decorated with ankle-bands, apparently metallic. Whatever the original model, the workmanship of the Idaean shields has been shown by Kunze to be Greek.

NOTE ON 'LEGGINGS AND GREAVES'

In Shaft-graves IV, V, and VI Schliemann found certain objects of gold-leaf varying somewhat in shape but all consisting of a curved horizontal band with a vertical strip (or the rudiment of one) running up (or down) from its central point.³ They were so thin that Karo believes them to have been made for the grave, though representing a more solid article which in real life was attached to something perishable. They occurred in pairs of which three were found, as well as one odd one, and only in graves which contained male interments; V and VI contained no others. II is the only grave with a male interment (poorly equipped) which yielded none, and they are also absent from I and III, which contained the remains of women only. According to Schliemann's own statement he found one specimen encircling the femur of a skeleton just above the knee with the vertical strip running upwards,⁴ and concluded that the horizontal band was attached to the top of a legging and the end of the vertical strip to a button on the lower edge of the Minoan loin-cloth or drawers. In spite of this explicit testimony both Schuchhardt and Reichel⁵ reproduce the companion to the thigh-bone specimen (in what position, by the way, was it found?) with the vertical strip running downwards; the plates in *Schachtgräber* give some in one position, some in the other. Karo quotes Schliemann's statement, but supposes

¹ See, e.g., *HW.²*, p. 61, fig. 32.

² *Ol.* iv, p. 100, pls. lxi, no. 997, lx, nos. 998 and 999. Specimens of a somewhat different shape are known from S. Italy; v. loc. cit.

³ *Schachtgr.*, pp. 219-21, pls. lxxvii and lxxviii.

⁴ *Mycenae and Tiryns*, p. 230, fig. 338.

⁵ Schuchhardt, p. 228, fig. 226; *HW.²*, p. 58, fig. 29.

that only a protective cap for the knee was attached to the band.¹ The evident dissatisfaction felt by three highly competent archaeologists with the solution propounded by Schliemann emboldens the present writer to record a statement made to her in 1911 by a distinguished German archaeologist in a position to be well informed. According to this authority the article was put round the femur by Schliemann himself, who subsequently admitted the fact to Dörpfeld, his coadjutor at a later date; he had evidently been struck by the fact that the thong which secures the gaiter on the Warrior vase, which he cites, was wound to its end above the knee. Schuchhardt and Reichel had presumably heard from Dörpfeld the statement about his action and accepted it; probably it is correct. Restored to its natural position below the knee with the vertical strip running downwards, the gold-leaf *Gamaschenhalter* probably represents a bronze attachment designed to strengthen a leather legging and prevent it from shrinking or warping when wet. It is true that no figure on any work of art from the Shaft-graves wears leggings, not even so large a one as that reproduced in *Schachtgr.*, pl. cxxix, but (as Karo argues) these are all products of Minoan art and seldom condescend to a provincialism; the chiton of the Mycenaean warrior on the Siege vase is a rare exception. The legging never appears in Crete; the high boot, which does, is absent from all the Shaft-grave monuments, though it appears on the Vapheio cups.² The warriors of the Warrior vase wear below their gaiters a boot or a sandal with strapping carried some way up the leg; the warrior of the megaron frieze is barefoot. That the metal adjunct had disappeared by a date early in the fourteenth century is established by its absence from the complete and untouched equipment of the King's grave at Dendra. Certain other features of the Shaft-graves have also disappeared—the diadems and ear-rings of the women and the one-edged sword of the men.

6. THE SPEAR

Like the sword, the spear of LH Greece was derived from Crete. Neither the EH nor the MH people have left any example, now that the 'shoe-socket' specimens from Sesklo,³ Leukas, Asine, and the Fourth Shaft-grave at Mycenae are regarded as halberds, i.e. blades hafted at right angles to the shaft (*v. supra*, p. 16). The normal Shaft-grave type, found in the early grave VI (Fig. 30) and also at Vapheio, has a leaf-shaped blade with a rounded, strongly marked mid-rib and a long socket formed by beating the

¹ *Schachtgr.*, p. 221; compare the cautious description of the pair from Grave IV, p. 77, nos. 267-70 and the comment (p. 221) on Schliemann's statement 'Man darf diese Angabe nicht missachten'.

² The fact that blood is visible trickling down the shins and ankles of Menelaos (*A* 146-7) suggests that he wore neither leggings nor greaves, and confirms the present writer in a suspicion that something Minoan underlies the wounding of Menelaos.

³ Where in addition to an actual specimen a mould was found. The blades have on each side a shoe-socket into which one half of the split shaft was thrust, and nails were driven through the shaft and the tang of the blade (Tsountas, *Διψήριος καὶ Σιδάριος*, pp. 334 and 354 and pl. iv, 10); the other examples are: Leukas, Dörpfeld, *Alt-Ithaka*, p. 315, Beil. 73; cf. *Schachtgr.*, p. 208, figs. 91-2; Asine (Frödin-Persson, *Asine*, pp. 257-8, fig. 182, 2. and *Schachtgr.* pl. cii, no. 463; cf. p. 207.

flat tang of the blade round a mandril and securing it to the shaft by one or more nails; to keep the edges together a ring or collar (the *πόρκης* of epic) was added at the end remote from the blade. The type had in all essentials been evolved in Crete before the end of MM III (Fig. 31);¹ it recurs

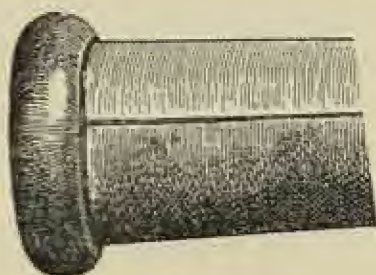


FIG. 30



FIG. 31

among the iron spear-heads found in the recent excavations at Olympia.² To judge by the illustration, the find includes some exceptionally large and heavy specimens, which doubtless represent hoplite spears of an early type (7th-6th cent.).

¹ Seager, *Explorations in the Island of Mochlos*, pp. 75-6, fig. 45; *P. of M.* iv, pp. 841 ff., figs. 821-3. It is necessary in view of later finds to qualify the statement of Evans that in the later Bronze Age the socket (p. 843) was invariably cast and the ring disappeared. At Dendra one spear-head was found in Chamber-tomb 2 which in every way conforms to the Shaft-grave type (*Royal Tombs*, p. 97, pl. xxxiii; the slit between the socket edges is plainly visible in the reproduction). This tomb is not earlier than the thirteenth century. In the King's Tomb, which falls in the first half of the fourteenth, four spear-heads were found of which one approximates to the Shaft-grave type; the remaining three resemble those found in the Chieftain's grave at Knossos (*P. of M.* iv, p. 844, fig. 825) in that the blade is very little wider than the socket. All four are described as having sockets fitted with rings, which can only mean separately fashioned and functional rings (*Royal Tombs*, pp. 36-7 and 63-4, pl. xx, nos. vi-ix). The reproductions fail to make the point clear; the description is quoted from the text. For an apparently early example from the acropolis of Mycenae which has the fold-over socket with nail-hole but no ring, see Wace, *C.M.T.*, p. 120 and pl. vii. Passing to the Iron Age, we find that some 200 iron spear and javelin heads from the latest German excavations at Olympia were not cast, but made in the ancient manner; some of them had rings (*Jb. lii, 1937, Olympiabericht*, p. 50). The finds of which the spear-heads formed part date principally to the seventh or early sixth century. It is true that the bronze spear-heads from Graves A and B in the Kerameikos and the iron example from Grave 17 (*Kerameikos*, i, pp. 101-4, pls. 51 and 52) have no rings, but they were found with cremations and had been on the pyre. When the shaft was consumed, the ring might well become detached and would not be sought for when the heads were picked up. The same is true of the spears from the cremation tumulus at Halos, which also have the slit socket. All that can be said is that the ring was not indispensable and that in the course of time it became rare.

² *Jb. lii (1937), Olympiabericht*, p. 50, fig. 19.

The long, heavy thrusting-spear was, as Karo points out,¹ the indispensable weapon of the Shaft-grave warrior, but it held a much lower place in his esteem than the sword. None of the Shaft-grave specimens has any kind of decoration, and in contrast with the amazing number of swords found, some elaborately ornamented, one or two spear-heads only were found for each Shaft-grave interment. In Grave V, which contained three skeletons, all male, there was only one, a plain though formidable weapon.² In the scenes of combat, however, on the stelai and engraved signets³ the spear plays a part quite as important as that of the sword. On the stelai its use in conjunction with the chariot should be noted. As the mainland Greeks do not seem to have used the bow in warfare, a long spear was indispensable; the throwing-spear was too feeble and uncertain a weapon for an organized chariotry.⁴ There is no indication that the throwing-spear was used in war on the mainland, but one piece of evidence from Crete suggests that it was employed there by the rank and file, and this may of course also be true of the mainland. The evidence in question comes from a fragmentary miniature fresco from the Palace on which is depicted a crowd of men aiming their spears upward, presumably at the defenders of a beleaguered city.⁵

On the mainland the spear seems to have risen in estimation in the course of the Bronze Age, since the King's Tomb at Dendra yielded four, two of them finely chased. From this date onwards we lack the evidence of spear-heads *in corpore* so far as the mainland is concerned,⁶ but that of the Warrior vase and stele, the Tiryns chariot sherd, and the fresco fragments from Mycenae⁷ is consistent in that the warrior's only weapon is a long

¹ *Schachtgr.*, p. 206.

² *Ibid.*, p. 140, fig. 57, no. 740.

³ *BSA.* xxv, p. 134, fig. 30, no. viii a, p. 136, fig. 31, no. xi a, p. 131, pl. xx, no. iv. Cf. the Battle in the Glen, and the duel on the plaque-head from Grave III (Figs. 2 and 5).

⁴ In epic the throwing-spear is of course used from the chariot (*E* 13, *Sc.*), but Homeric chariotry is not organized. In the one passage which gives a hint of a tradition of a scientific use of the arm (*A* 307) Nestor's order is ἔγχεσσι δρεσάμενοι. At first sight the hunters on the Lion-hunt dagger-blade appear to throw their spears, but the length alone, which must be hardly short of 10 ft., is against this. The hunters are not, as the frieze-like character imposed on the composition suggests, advancing in procession one behind the other; they form a compact front-line, aiming or delivering thrusts simultaneously. For smaller game the throwing-spear was doubtless employed. Egyptian chariot-warriors used bows, their Hittite opponents spears.

⁵ *P. of M.* iii, p. 82, fig. 45; cf. p. 31 for a discussion of the date, which must fall between the end of MM III and the fall of the Palace. The martial subject would be appropriate to the later period; see *supra*, p. 22. On another Palace fresco fragment the 'Captain of the Blacks' carries two light spears; his men, if we may judge by the scanty remains, one each (*ibid.* ii, pp. 755-6, pl. xiii), but the equipment of this exotic troop has no bearing on the practice of native Crete, still less on that of the mainland. Of the frescoes from Tiryns in which spears appear in pairs, as throwing-spears commonly do, the earlier (*Tiryns* ii, pl. i, 6, pp. 5-6) almost certainly and the later (pl. xi, 5) without any doubt represented hunting-scenes and therefore do not bear on the military question.

⁶ Several were found in the Italian excavations at Ialysos; see Maiuri, *Ann.* vi/vii, p. 133, fig. 54; p. 199, fig. 124, and p. 230, fig. 147. Only in the second case—a single interment with a single spear—is it possible to relate a weapon to a deposition.

⁷ *BSA.* xxv, pl. xxvii.

single spear. In real life it must of course have been accompanied by a dagger, long knife, or short sword, like that of the Assyrian archer or spearman, which even by the Assyrian artist, lover of detail as he is and generally working on a comparatively large scale, is now and again omitted. This phase of predominance for the spear foreshadows the practice of classical Greece, when legendary hero and living hoplite alike were spear-men; in ancient Greek there is no word for swordsman. None the less the sword must have had a very considerable importance, alike in the Late Bronze and the Early Iron Age, as will appear in the next section.

Passing to the proto-Geometric age, we find little to assist us in the cemeteries of Assarlik and Vrokaströ, since in both cases it was impossible to correlate the spear-heads with the various depositions.¹ The only exception was that of the single deposition in Ch. T. VII at Vrokaströ, with which one spear-head was found.² Two heads of bronze and three of iron from the Kerameikos were associated each with a cremation urn; to these may be added the single iron spear-head from the proto-Geometric grave on Skyros which also yielded a shield-boss. From Tholos VI at Marmariæ come the fragments of one sword and (probably) one spear.³ So far as our scanty evidence goes, it indicates that the Bronze Age equipment of one (thrusting) spear and a sword continued in the proto-Geometric period; and this implies that close-range fighting continued to be the dominant type.

In the Geometric age a change appears in certain regions. At Athens the remains of a pair of spears were found in one of the later graves in the Dipylon cemetery.⁴ Further evidence is supplied by Attic Geometric vase-painting which regularly represents warriors as carrying two, occasionally three spears, and a sword of varying length which is sometimes accompanied by a dagger. A spear of which more than one can be carried can only be a throwing-spear; moreover, in some of the battle-scenes spears are shown flying through the air or dead men lie transfixed with no foe near.⁵ Nor does there appear to be any example of a fight with spears at close quarters, though in practice throwing-spears must have been so used in emergencies. It is clear, therefore, that Attica had abandoned the traditional method of fighting for one less adventurous; how far the change

¹ *Ker.* i, pp. 173, 220, pl. 76; iv, p. 27, pl. 38. The tholos graves of Mouliani are hardly more informative. Grave A contained two spears, but also two swords, all associated with the single inhumation. Xanthoudides was inclined to think that when the cremation deposit was introduced, some clearing up was done and the grave-goods of two inhumations were amalgamated. With the cremation were associated the fragments of an iron sword and dagger only—unless a spear-head had perished beyond recognition. It must be remembered that this tomb was found and excavated by a peasant without supervision, though with care and intelligence. Tomb B with two inhumations contained two spear-heads, one so small that it can hardly have been a weapon of war.

² *Vrokaströ*, pp. 153-4; cf. p. 138.

³ *BSA.* xxxi, pp. 10 and 36.

⁴ Dümmler, *AM.* xiii (1888), p. 297; xviii (1893), pp. 107-8.

⁵ Fig. 13 *supra*, P. et C. vii, p. 178, fig. 61.

extended we are not at present in a position to say. In the chapter on the Shield attention has already been drawn to a Geometric sherd from the Argolid, probably from Mycenae, and a gem from Siphnos on which only the single spear appears. On the other hand, the fragments of an almost certainly local vase from the Argive Heraion exhibit a procession of warriors armed with two,¹ and the warrior with hour-glass shield on a Geometric sherd from the site of the Heraion on Samos carries a pair.²

The cremation tumulus at Halos yielded unequivocal evidence that there the ancient mode prevailed, the equipment of the warrior being spear, sword, and one or more long knives.³ That the new is common to Attica and the *Iliad*, which presumably means Ionia, is an interesting point and one which recalls the common attitude of these regions to cremation; it also suggests that the change to the throwing-spear was made in Greece before the Ionian migration.

THE SPEAR IN HOMER

The spear is the weapon *par excellence* of the Homeric hero. It has given rise to a number of martial epithets—*ἔγχυσίμωρος*, *ἔγχέσπαλος*, *κλυτὸς ἔγχει*, *δουρικλειτός*, *δουρικλυτός*; a woman captive is called *δουρικτήτη*. 'Excelling with the spear' is the highest praise of the warrior.⁴

Of the two common epic names for the spear one, *ἔγχος* or *ἔγχέη*, is of unknown origin and survives the age of epic only in poetry and with a vague connotation; the other, *δόρυ*, is of I.-E. derivation and becomes the word of ordinary Greek prose. Since the MH folk apparently had no metal-headed spears it is possible that like many Germans in the days of Tiberius they used wooden shafts burned at the tip (*praeusta*),⁵ in which case, supposing them to be responsible for the introduction of the word *δόρυ*, its emphasis on the wooden part of the spear would be explained. *ἔγχος* may have originally denoted the Cretan type found in the Shaft-graves. From the beginning of LH onwards there is little but size to distinguish spear-heads, and if any distinction ever existed in heroic poetry between *ἔγχος* and *δόρυ*, it had been obliterated long before their appearance in the *Iliad*. More probably each race maintained its own word for the same object; in the case of *ξίφος* there was no such competition, for the MH people certainly had no sword of their own. In the language of daily life the I.-E. *δόρυ* prevailed with several 'wooden' meanings, of which two (tree-trunk and

¹ *Jb.* xiv, p. 85, fig. 44; *JHS.* lviii (1938), p. 232, fig. 10; *Arg. Her.* ii, p. 112.

² *AM.* liv (1929), pl. ii.

³ *BSA.* xviii, p. 25.

⁴ See, e.g., *H* 289, *N* 77, *Π* 809.

⁵ Tacitus, *Ann.* ii. 14, 4. Of the remaining Homeric terms for spear there is not much to be said. *αἶχμη*, properly the point, is only occasionally used in the sense of spear; the use must, however, at some time have been commoner, since we have the derived verb *αἰχμάζω* and noun *αἰχμητής* virtually equivalent to *πολεμιστής*. *αἰχμητής* like *ἔκων* is restricted to the throwing-spear (*B* 774 and *Π* 389 f.); when it is necessary to distinguish spears which can also be used for thrusting, *ἔγχος* is used (*O* 708-12).

ship's timber) are found in epic; the advantage of a second word with a different metrical value ensured the survival of ἔγχος in the hexameter. It is possible that a few traces of the Bronze Age thrusting-spear survive in Homer. In the arming-scenes most free from remodelling and later tampering only a single spear is taken and the word is ἔγχος;¹ only Patroklos and Agamemnon take a pair of δοῦπε. In *I* Paris, who some 300 lines earlier was carrying a pair of δοῦπε as well as his bow, takes an ἔγχος in preparation for his duel with Menelaos,² and Achilles naturally takes the famous ἔγχος received from his father which none but he could wield.³ This may be a reminiscence of the hand-to-hand fighting of the Bronze Age, but Achilles throws his spear freely and its epithet ἰθυπτελὸν, though unique,⁴ shows that it was thought of as designed for this. Like Achilles, Aias never appears with a pair of spears, but he, too, makes casts.

The duel must have been a stock motive in heroic poetry. In our two outstanding examples, that of Paris and Menelaos and that of Hector and Aias, each combatant starts with one spear only and throws at his opponent with varying fortunes;⁵ it is difficult not to believe that in its original form the duel was fought with the thrusting-spear. This is what we actually get in the spear-duel at the Games,⁶ whether it be an echo of Bronze Age tradition—and funeral ritual is apt to be conservative—a record of contemporary practice, or, possibly, an interpolation showing the influence of the new hoplite tactics. In what appears to be a duel at funeral games depicted on a Geometric vase⁷ the weapon is the sword.

The most natural conclusion is that some considerable time before the composition of the *Iliad* the throwing-spear had become dominant both in actual warfare, at any rate in Attica and Ionia, and in heroic poetry, and a large number of formulae had been established. Generally speaking, ἔγχος appears to have been used by preference for the weapon of outstanding heroes; it alone is described as ὀβριμον and also by the phrase βριθὸ μέγα, σπιθαρόν.⁸ Otherwise reserved for the spears of Athene and Achilles, this last phrase is very inappropriately extended to the throwing-spear which Patroklos is holding at the moment of his death.⁹

¹ Cf. *E* 745 (Athene), *O* 482 (Teukros), *O* 126 (disarming of Ares).

² *I* 338; cf. 13.

³ *I* 387 ff.; for its history in later mythology see Schol. *I* on *I* 142. The description in *T* suggests a reminiscence of the Bronze Age, but Strabo (448-9), rightly remembering the use Achilles makes of it, claims it as a πάλαιον and by implication translates πάλαι as 'throw'. He calls attention to the fact that φερόν, the name of the great spears of naval warfare kept in the ships (*O* 388 and 677), is the only Homeric type which is used exclusively at close quarters (*A* 469 = *A* 260, *A* 565, *N* 497).

⁴ Except for a v.l. of Zenodotus *Y* 273; cf. *Y* 99. Another peculiarity of the spear of Achilles is that it alone in the *Iliad* is called μέγας, a term comparable to ὀβριμ; the epithet μέγας is common to δόρυ and ἔγχος. Only in the interpolated passage in the *Catalogue* which deals with the Abantes is the plural used to describe the (certainly hoplite) spear of this contingent. *B* 543.

⁵ *I* 346, 353; *H* 244, 249.

⁶ *Ψ* 816. It may be noted that the panoply of Sarpedon, offered as a prize in this contest, consists of ἔγχος, ἑρπιδέα, and δαίς.

⁷ *Arch. Zeit.*, 1885, pl. viii; *P. et C.* vii, p. 181, fig. 66.

⁸ *E* 746 = *Θ* 350, *II* 141, *T* 383.

⁹ *II* 802.

The use of the throwing-spear implies that of the shield with telamon. The warrior must carry a second spear, since he cannot reckon on retrieving his own even after a successful cast, nor on picking up an opponent's which has gone wide, nor on despoiling a fallen foe, though all these means of re-arming find a place in the *Iliad*. It is probable that the chariot carried a further reserve, but there is no mention of this in the poems. As a preliminary to battle the warrior, while still at a distance from the enemy, stalks *κατὰ σπάρον* brandishing a spear in each hand. This attitude is described in detail in the case of Sarpedon in the prelude to his assault on the wall; he straightway brought his shield to position in front of him and then, waving two spears, set off in search of Glaukos. Since no one would brandish two spears in one hand, he must have allowed the shield to hang by its telamon, screening his body. The formula *πάλλον ὄξέα δοῦρα* (or *ὄξέα δοῦρε*) is always used of a man in similar circumstances, showing that Sarpedon's procedure is normal.¹ In the actual engagement the warrior must have once more grasped the handle of his shield, probably the moment he had discharged his first spear and transferred the second to his right hand; it was vital to his defence to be able to manœuvre his shield to ward off the spear of his opponent.

The archaeological record has shown that the spear underwent a minimum of change in the Late Bronze and Early Iron Ages; there is naturally little to be learned about it from the Homeric poems. That the *πόρκης* has little value as a criterion of date has been indicated above; but since it tends to be superseded by the cast socket, it may be derived in epic from an ultimately Bronze Age source. It is mentioned twice only in the poems; in each case the spear is Hector's and the *πόρκης* is said to be of gold.² So is that of Achilles' spear in the *Little Iliad*.³ No *πόρκης* of precious metal is known from Greek lands; Evans cites an Egyptian example, decorated with inlaid work in gold and dating to the last years of the sixteenth century. The design of the inlay shows strong Minoan influence.⁴ The socket is generally called *καυλός*,⁵ once *αὔλος*. The meaning of the

¹ E 495, Z 104, A 212; cf. F 18-20.

² Z 319-20 = Θ 494-5. As the poet of Θ almost certainly borrowed from Z, there is no need to regard the lines as a formula.

³ Schol. ad Pind. *Nav.* vi. 83; Kinkel, *EGF.*, p. 41. In the same passage the Pelian spear is credited with a second peculiarity, viz. a double point. This form is not known at any date as a Greek weapon, but on a relief seen at Iconium by Texier, on whose sketch of it our knowledge of the monument depends, it is carried by a warrior of semi-Hellenized appearance (P. et C. iv, p. 141, fig. 359). There is some reason to think the relief not later than the fourth century. The Ionians may have encountered the weapon in Anatolia at an early date, which would account for its finding its way into the Cycle. On that authority the allusions in tragedy to this feature of Achilles' spear are no doubt based (Aesch. *Fr.* 152, Soph. *Fr.* 136 Nauck², 152 Pearson). The fragment ascribed to Sophocles is undoubtedly a conflation of two, of which only the first is necessarily Sophoclean.

⁴ *P. of M.* iv, pp. 842-3, fig. 824.

⁵ N 167, 608, II 115, P 607. In II 538 the word is used of the tang of a sword and would no doubt be used of that of a spear-head of a primitive type, but the spear-heads of heroic poetry must have been socketed.

latter is guaranteed by the epithet *δολύχαιλος* applied to the *αίγανέη* in the *Odyssey*.¹

Both *ἔγχος* and *δόρυ* are constantly described as long. The length of Hector's spear—11 cubits—is no doubt mentioned as exceptional, but it is perhaps for a thrusting-spear not absolutely impossible or at least it is within the limits of legitimate heroic exaggeration. The length of the Macedonian sarisa was twelve.² For a throwing-spear the length is obviously out of the question.

Once Diomedes's spear is described as being stuck upright in the earth;³ this implies the presence of a *σαυρωτήρ*. The trait was perhaps noted by the later author of *K*, for in *K* 153 the spears of Diomedes's comrades are thus disposed of for the night. Its use in Greece seems to have been exceptional; it is true that it appears on the Warrior vase, but Karo notes its absence from the Shaft-graves. It is also lacking at Dendra, and no example seems to be known from any proto-Geometric or Geometric grave; Wace records its absence from Halos. There are, however, a few specimens among the recent finds at Olympia.⁴

Epithets are unenlightening. *ἀμφίγρον* occurs only with *ἔγχος* and only in the dative plural; of its few appearances most are in a formula recording pursuit. It cannot be satisfactorily explained; the most plausible interpretation is 'with a curve on each side', i.e. leaf-shaped, which in fact the Greek spear is throughout its history. Why this all but universal attribute should be emphasized it is not easy to see, unless, indeed, we accept Flinders Petrie's interesting and plausible account of this type of blade,⁵ wherever found, viz. that it was used as a slashing as well as a stabbing weapon and therefore required some width, and that such a weapon would be used against a foe with weak body armour or none at all. It is a fact that the spear-head of the fifth-century hoplite, if we may judge by vase-paintings, was much smaller and consequently narrower than that of the Bronze Age and also than many of the Olympia find; it was certainly used exclusively for thrusting, and predominantly against men in armour.

7. THE SWORD

Since the Homeric sword, as even a cursory reader of the *Iliad* knows, is a cut-and-thrust sword, there is no need to consider in detail those earlier

¹ P 297, doubtless on metrical grounds; *αίγανέας δολύχαιλους*, i 156. Cf. p. 244 *supra*.

² Theophr. *de Plantis* iii. 12. 2. The sarisa, however, was wielded with both hands.

³ Z 213. For Herodotus the *σαυρωτήρ* was apparently a normal part of the spear; see vii. 41. It is a reasonable conclusion that it was an Anatolian feature; in which case it may be added to the Eastern traits on the Warrior vase.

⁴ Olympiabbericht, p. 57.

⁵ *Tools and Weapons*, p. 51, pl. xl. An objection to this explanation of the epithet is that the typical early Greek spear-head tapers too rapidly to be effective as a slashing weapon. Only a few have the shape proper to the slashing-sword, whose edges remain virtually parallel until they near the tip. The King's Tomb at Dendra contains examples of this shape, which is almost entirely absent from the Shaft-graves.

blades, all of them rapiers, which are among the chief treasures of the Shaft-graves; a full account of them will be found in *Schachtgräber*. Their Cretan origin, never seriously in doubt, is now fully attested by the vast number of votive blades dating to the period of transition from MM III to LM I which were found in the sacred cave of Arkalochori on the edge of the Mesará (see Pl. XVIII).¹ The great ceremonial sword of Mallia,² falling at the very beginning of MM I, is earlier still, but is so obviously an object of ritual or symbol and is so unpractically hilted that we cannot argue from it to counterparts in contemporary use. Not only are the early appearance and the sanctity of the rapier in Crete guaranteed by Arkalochori; its connexion with the Great Goddess is proved by its appearance, equipped with a horned guard, brandished in the right hand of the deity on a carnelian bead-seal from Knossos.³

The history of the Minoan blade is continued in the Shaft-graves, where there is obviously no reason to take it as anything but a weapon of war. Here the round-shouldered short-tanged blade which alone was found at Arkalochori is in the majority, but side by side with it a more serviceable type is developed which has almost square, slightly horned shoulders and a prolonged and much stronger tang with flanged sides to hold the handle-plates; in fact, the stage of hilt and blade in one has virtually been reached. The midrib remains extremely prominent, and though the blade is somewhat shorter and broader, Karo, who distinguishes the two types as A and B, definitely states that none of either type whether long or short could be used for slashing,⁴ and in scenes of combat such as the Battle in the Glen the point is invariably used. The regular protection for the hand is a horned guard which forms a part of the handle; there is as yet no example of the cruciform guard, which makes its appearance in the period immediately succeeding the Shaft-grave. In both classes the heads of the rivets which attach the hilt to the blade, if not included in a plating which covers the whole handle, are generally gold-plated; silver-plated rivets, however, are found in some examples of both classes and in the hilts of a dagger and a broad-bladed knife from one of the new chamber tombs at Dendra.⁵ Type B is affiliated by Karo to the Mallia sword.

¹ *AA.*, 1935, p. 252, fig. 5 on p. 250; *P. of M.* iv, supplementary plate lxxviii. For a full account of the Cretan sword see *ibid.*, pp. 845 ff.

² *Mon. Piot.* xxviii (1925-6), pp. 1 ff., pl. 1; *P. of M.*, ii, p. 272. Cf. *Schachtgr.*, pp. 200 ff.

³ *P. of M.*, ii, p. 793, fig. 517. Cf. *ἐκφύλακτος* as an epithet of Demeter, Schol. ad Lycophr. *Alex.* 153. *ἐκφύλακτος δὲ διότι ἐν αὐτῇ Βασίλισσά Ἰστέρα ἢ Δημόφρη ἐφόρει ἔχουσα*. The goddess with the figure-of-eight shield on the engraved amethyst in the British Museum (Pl. II, 1) holds a pommel-hilted rapier upright in each hand.

⁴ *Schachtgr.*, p. 201.

⁵ *Ibid.*, pp. 201 and 205, and cf., e.g., nos. 465-6, 727-8, 730, 748, 766, 770, and 906: *NT.*, pp. 43 and 45 and fig. 48. Gold-plated rivets are found at Knossos, at Dendra, and in one of the Muniisá swords at the very end of the Bronze Age. There is no other example of silver-plated rivets until the Iron Age of Cyprus. The hilt of an iron sword (4727) in the Cesnola Collection has silver-plated rivets of bronze. The sword can hardly be earlier than the seventh century.

The rapier apparently remains the characteristic sword of Crete until the fall of Knossos, where it occurs in graves of the very end of the fifteenth century in the cemetery of Zafer Papoura;¹ to judge by the contents of these graves, a man of standing normally had two, one long and one short. One long and three short swords of this type found in the King's grave at Dendra bring down the history of the thrusting-sword into the first half of the fourteenth century.² In this grave three types of hand-guard are illustrated—the normal horned and cross-guards, and the much less usual hooked guard, a development of the horned; but the guard is now a part of the blade, not of the hilt. In the cemetery of Zafer Papoura only one blade of the round-shouldered, short-tanged type was found.

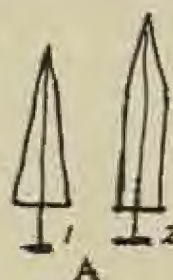


FIG. 32

There remains a type of Minoan sword which to all appearance would be capable of dealing a slash. The only example *in corpore* comes from the Fifth Shaft-grave.³ Karo describes it as a dagger, no doubt because it approximates to that shape, but as its length minus the pommel and part of the tang is 50 cm., it is better classed as a sword. It is probably the type carried by Minoans depicted on the walls of a group of Egyptian tombs of the fifteenth century,⁴ and also on the 'Sword Tablets' of Knossos,⁵ part of a series of inscribed clay tablets which record the contents of the Palace armoury.

The sword carried by the fleeing warrior on one of the stelai found over Shaft-grave V⁶ has sometimes been claimed as an example of a two-edged slashing-sword, but as the stele is about a century earlier than the earliest of the Egyptian paintings and moreover is badly weathered, the assumption is rash and improbable. The sword appears rather to be one of the heavy one-edged blades closely resembling the kopis of red-figured vase-painting which occurred in some of the Shaft-graves⁷ and at Vapheio.

¹ *Preh. Tombs*, T. 36 (the Chieftain's Grave), p. 52, and fig. 53; T. 44, p. 62, fig. 65. Cf. pp. 105 ff. and pl. xci.

² *Royal Tombs*, pl. xx, pp. 34 and 61-2, where Persson notes the complete similarity of one of his specimens to one from the Chieftain's grave.

³ *Schachtgr.*, no. 747, p. 135, and fig. 50, pl. xci.

⁴ *BSA*, xvi, pl. xiv (Tomb of Sennut); *ibid.* vii, p. 171, fig. 2; *Essays in Aegean Archaeology*, p. 31, fig. 1 (Tomb of Rekhmire); Bessert, 541 (middle of lower register), Tomb of Menkheperreseneb.

⁵ *P. of M.*, iv, p. 855, fig. 838 A, and p. 857, fig. 839 A. The types in the same figure over B are probably careless representations of the same shape. They can have nothing to do with the still unborn 'Naue Type II' class which develops in central Europe and finds its way to Greece at some date in LH III. Nor has any weapon ever been found in Greece so wide in the blade or with so marked a widening through the upper part of its length in the direction of the point. The so-called 'leaf-shaped' (i.e. Naue Type II) swords of Greece have for the most part parallel edges; if there is an increase in breadth, it is very slight.

⁶ *BSA*, xxv, pl. xx; *Schachtgr.*, pl. v.

⁷ *Schachtgr.*, p. xvii.

THE BRONZE AGE SLASHING-SWORD

Apart from the unique blade from Shaft-grave V, the first cut-and-thrust sword appears in the Aegaeon area at a date not later than 1200. It is the bronze sword formerly known as 'Naue Type II' and sometimes (so far as Greece is concerned, misleadingly) as the leaf-shaped sword. The type undoubtedly originated in central Europe, probably in the Hungarian plain.¹ The blade is two-edged, has a serviceable point, and is made in one piece with the hilt, which is sometimes open at the end and sometimes has a spur for a pommel. There is either no midrib or one so broad, flat, and gradual in its rise that it would not impede a slashing-stroke. In Greek specimens the edges of the blade are usually parallel until they begin to taper to the point; occasionally there is a barely perceptible expansion from the hilt to the point about two-thirds down the blade at which tapering begins. There are rivet-holes for the attachment of plates in the hilt and in the shoulders, which are rounded. As some of the extant examples are defective, exact estimates of size are not always possible; but the lengths run from slightly under 2 to about 3 feet.² Whether all or some of these swords are imports or are Greek imitations of a foreign model, it is impossible to say; it is certain that they were not brought by any invading horde. The Argolid, in which four of our examples were found, shows no trace of any change in the population; at Mycenae the unbroken series of interments in the chamber-tombs betray neither violation nor change of custom.³

At present our only upper limit for the introduction of the new weapon is furnished by the King's grave at Dendra, dated to the first quarter of the fourteenth century, which contained no example of it though well supplied with Minoan types.

In mainland Greece none has occurred in a datable context. Two come from Mycenae. Schliemann found one in the LH III house south of the Grave Circle;⁴ presumably it was in use at the date of the destruction of the city. The second was found by Tsountas on the acropolis,⁵ where it formed part of a hoard of bronze objects, probably the property of a smith who intended to melt them down. It is reasonable to suppose that it had seen service for some time before it found its way to the scrap-heap. A

¹ See Peake, *The Bronze Age and the Celtic World*, pl. xii (examples from Greece), and cf. pl. ix (Hungary) and pl. xiii (Italy). On pl. xii, nos. 1 and 2 should be reversed; no. 2 is Schliemann's find, the first of its class found in Greece.

² The Minoan thrusting-sword has much the same range, cf., e.g., *Schackgr.*, pl. lxxx.

³ See *Ch. T.*, p. 138.

⁴ *Mycenae and Tiryns*, p. 144, fig. 221. Helbig's reproduction (*HE.*¹, p. 336, fig. 130) is extremely misleading, as a midrib which does not appear at all in Schliemann's and which appears to be semicircular in section has been added to it. I cannot say from memory that there is no indication of a midrib on the original, but I know that there is nothing which could impede a slash. The length is 65 cm., including the hilt, which measures 9.

⁵ *Eph. Arch.*, 1897, p. 110, pl. viii. 3. The hilt is missing; the actual length is 50 cm.

third specimen is a chance or surreptitious find, said to come from a grave, unpublished, from Schiste Hodos in Phocis.¹ It is complete and of exceptional length, partly because it has the not very common pommel-spur, which brings its total length to c. 76 cm. It can hardly be said to have a midrib, but the blade is slightly thicker down the middle, and a groove outlines this portion, running parallel to the edges.

The Tiryns hoard contained two specimens,² of which the smaller, which lacks the hilt, measures in its actual state 55 cm., the larger, which has lost its point, 81.3 cm. Owing to the flattened curvature of the shoulders Peake classes this pair as slightly later than those hitherto described. The hoard, miscellaneous and apparently formed by a professional tomb-robber, contained elements ranging in date from LH I to the end of LH III or possibly even a little later.

The discovery in the Mycenaean settlement at Ugarit of a factory engaged in the production of swords of this type, of weapons complete and incomplete and of moulds for their production, suggests that it was adopted as the regular arm of Greece at a date before the communications of Mycenae with the Levant had broken down, as they seem to have done before the appearance of the Granary style in LH III vase-painting.³ That it had reached the eastern Mediterranean before 1200 is proved by a specimen found in the Delta engraved with the cartouche of Sethos II,⁴ whose reign of ten years falls between 1215 and 1200 (Pl. XIX, 1; 1). Two other swords of the same type also found in the Delta (Pl. XIX, 1; 2 and 3),⁵ though they bear no such date-mark, are presumably to be assigned to about the same period. Assuming the equation Akaiwasha = Achaeans to be correct, they may be relics of the Achaean contingent which took part in the Libyan invasion of the Delta and shared its defeat c. 1221. The sword with the cartouche may be a trophy of the battle prized by the Egyptian who acquired it, or alternatively, for aught we know, the weapon of an Achaean mercenary in the service of the Pharaoh. Shardana fought on both sides in the great Land and Sea battle in the reign of Ramses III.

The slashing-sword found its way to Crète. In a small tholos tomb at Mouliañā which contained LM III pottery of the latest class (Tomb B) two were found, one complete with pommel-spur, 55 cm. in length (Pl. XIX, 2); the other, which lacks the top of the hilt, measures in its actual state nearly

¹ *Ibid.*, p. 110, fig. 4, where Tsountas figures the hilt and the upper part of the blade and gives the length as 77 cm. Owing to the label of the case in which it was exhibited before the war, it is sometimes mistakenly said to come from Lebadeia.

² *J.M.* iv (1930), p. 135, *Beil.* xxxvii.

³ Reproductions of all the bronze swords of this class from Greek lands and from Egypt known in 1922 are conveniently grouped on a single plate (XII) by Peake, *op. cit.*

⁴ *BSA.* xviii, pp. 282 ff. and fig. 1, where the sword is discussed by T. E. Peet and its importance in determining the date of the latest phase of the Bronze Age in the Aegean is indicated. See also Wolf, *Bewaffnung*, pl. xv, 1 and p. 193.

⁵ *Ibid.*, pl. xv, 2 and 3.

46 cm.¹ In a neighbouring tholos (A) of the sub-Minoan period two more slashing-swords were recovered; they had markedly leaf-shaped blades, but the square shoulders characteristic of one Minoan type of blade (Pl. XIX, 3). One specimen, complete, measures 58 cm., the other, which lacks only the extreme top of the hilt, 44. In this tomb a cremation burial of only slightly later date was found; the pottery associated with it was proto-Geometric and fragments of an iron sword were found.

At Lakkythra in Kephallenia a remarkable series of chamber-tombs has been excavated; the pottery is of a very late LH III class. In each tomb the dead were separately interred in pits hewn in the rocky floor, and in one of these a bronze sword was found which was certainly of slashing type;² its shoulders, however, though they are too damaged for certain reconstruction, had not the convex curve characteristic of the central European type, and may have been square. Two other Kephallenian examples found at Diakata have square shoulders and the T-shaped hilt characteristic of Greek swords.³

As already stated, all the Greek slashing-swords of the Bronze Age have points, and several of those enumerated are so light as to suggest that they were meant for use with the point as least as much as with the edge.

That the slashing-sword was an important factor in eastern Mediterranean warfare at this date is suggested by its appearance in the hands of the Shardana, though in a different form. These roving mercenaries appear at the battle of Kadesh as represented on the walls of the Ramesseum at Abydos armed with a single spear and carrying in their right hands, ready for immediate action, sharply tapering, pointed swords so short as to be hardly more than long daggers.⁴ Though obviously designed for the thrust, they also had an edge, for they are used to saw off the hands of the slain as well as to inflict a stab.⁵ The Shardana bodyguard of Ramses II, however, as depicted on the walls of the temple of the Sun at Abu Simbel,⁶ had so far as the form goes mere enlargements of the long daggers of Kadesh, but too large and massive to be designed for use with the point.

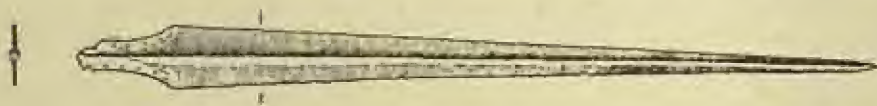


FIG. 33

One specimen of this type *in corpore* (Fig. 33), found at Gaza and now in the British Museum,⁷ measures in its actual state (a small part of the hilt is

¹ *Eph. Arch.*, 1904, p. 46, fig. 11.

² *Ibid.*, 1933, p. 25, pl. 16.

³ *Deltion v* (1919), p. 118, fig. 34. Lengths, 6.39 and 6.45.

⁴ *Fremdvölkerphot.* 84, partially reproduced E. Meyer, *G.A.A.* ii, 1, pl. v; Bossert⁵, 551.

⁵ Cf. *Fremdvölkerphot.* 88 and 89.

⁶ Pl. V.

⁷ Hall, *Civilization of Greece in the Bronze Age*, p. 254, fig. 329.

missing) about 75 cm. and retains the midrib characteristic of the thrusting-sword in a form so marked that it would prevent the blade from carrying a slash through and indeed from penetrating more than an inch edgewise. None the less its great weight would undoubtedly prevent its use with the point except on occasion; no one who has handled it could imagine for a moment that it was designed for use with anything but the edge. It would seem that the Shardana had encountered some other power—by no means necessarily resident in Greece—armed with a slashing-sword so formidable that they modified their own weapon in order to meet it. This hypothesis derives some support from the alterations probably consequential in the Shardan helmet, designed to give rather better protection to the forehead and the back of the neck. It will be remembered that the Warrior vase registers similar improvements in the helmets of mainland Greece. The warriors of Kadesh and the bodyguard of Ramses II wear shallow skull-caps surmounted by a knob and horns; those engaged in the Land and Sea fight under Ramses III have immense swords, much deeper helmets, and the curious 'lobster-plate' corslets, also worn by the Pulesati, which vanish with the Bronze Age and are never seen again.¹

THE IRON SWORD

The iron sword follows the bronze in Greece at a very brief interval. The bronze pair from the hoard of Tiryns falls at the very end of LH III; after them the bronze sword is no more seen on the mainland.² Owing to the fact that in the sub-Mycenaean cemeteries so far known to us (Salamis and the Kerameikos) weapons were not buried with the dead, that period is almost if not quite a blank. On the latter site, however, on the edge of the sub-Mycenaean cemetery an inhumation grave was found to contain an iron slashing-sword. If not sub-Mycenaean, this sword is surely transitional rather than proto-Geometric.³ The excavators tentatively assign the end of the sub-Mycenaean style to a date early in the eleventh century, from which the proto-Geometric extends to about 950, when the transition to Geometric begins. To about the middle of this latter period, still therefore to the eleventh century, are ascribed the next of our series, three swords from proto-Geometric graves (cremation) in the

¹ For the Shardana of the Land and Sea fight see the University of Chicago Oriental Institute Publications, *Mémoires Hittites*, i, pl. 50, registers C and D. A Shardan from Kadesh and another from the Sea fight are placed side by side in Fig. 23 a and b, p. 228 *supra*.

² One example of a short thrusting-sword of bronze is known from Samos, where it was said to have been found in the same grave as a bronze figurine of the seventh or early sixth century (*JHS*, xxix (1909), p. 194, fig. 2). Such unsupported statements of dealers or tomb-robbers have little evidential value; alternatively, tombs may continue in use over several centuries, like those near Knossos (*BSA*, xxix, p. 227).

³ *Kor.* iv, pl. 38, Inv. M. 115. From Grave 2. Its resemblance to the next in the series, that from Grave 6 (*Kor.*, i, pl. 76), is not so close as the editor's description (p. 36) suggests; it stands in some respects closer to the bronze Woodhouse sword in the British Museum, though it lacks the horned guard. See *BSA*, xxix, p. 114, fig. 1, 2.

Kerameikos, the four being much the most considerable objects of iron earlier than the Geometric age which have so far been found in Greece. Of the proto-Geometric examples one (Fig. 34) is not of the type whose history in bronze we have followed and which continues to prevail in the Early Geometric age.¹ It has indeed the rounded shoulders characteristic of it, but combines them with a tapering blade with a slight midrib obviously designed for stabbing and derived from the old Minoan-Mycenaean form. An iron sword from Enkomi and a part of another, both in the British Museum (no. 269), present the same combination of characteristics (which also appears on a bronze example from the same site), and the sword of the Griffin-slayer on the mirror-handle, also from Enkomi, appears to be similar. Though the Enkomi swords are of iron, they fall, like the mirror-handle, within the limits of the Late Cypriot Bronze Age; but as the end of that age cannot at present be precisely fixed, it cannot be said positively that the specimens of Enkomi are older than those of the Kerameikos. That the type originated in this region is, however, certain, nor can it be doubted that the Kerameikos example is an import.² In all probability the same is true of the three slashing-swords,³ since it is in the highest degree improbable that the native industry, even if

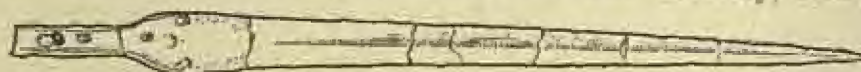


FIG. 34

already in existence, could so early have produced a sword in an unfamiliar metal whose smelting presents special difficulties. These are the only iron swords of pre-Geometric date known from the mainland, for though the upper part of a similar specimen was found in one of the late tholoi at Marmariane in Thessaly⁴ which belong to the proto-Geometric age in that region, this is considered by the excavators to begin and end later than the proto-Geometric period farther south; they put its opening c. 1000 and its end in the latter half of the ninth century. The Marmariane sword is not therefore necessarily earlier than the specimens from Early Geometric graves in Athens, which until the excavations in the Kerameikos were the earliest known.

In Crete proto-Geometric examples of iron swords have occurred at Kavousi, where one was found in a house,⁵ in a chamber-tomb at Vrokastro, where the fragments formed part of a 'corroded mass' in which not even the number of blades could be established,⁶ and in Tomb A at

¹ *Ker.* i, p. 100, fig. 8, Grave E.

² A bronze bowl from a somewhat later grave (48) is doubtless, as the editor holds, an import from Cyprus.

³ For the earliest of the proto-Geometric examples see Pl. XIX, 4 (after *Ker.* i, pl. 76).

⁴ *BSA.* xxxi, pp. 36-7, fig. 15, no. 22.

⁵ *AJ.A.* v (1901), p. 137, fig. 4.

⁶ *Vrokastro*, p. 235.

Moulianá, where the fragments of a single sword and dagger¹ did not admit of reconstruction. In the Vrokastro tomb, which contained at least six depositions and was therefore in use for some considerable time, there was also found a bronze volute tripod of a type known at Enkomi.² The probability that the earliest iron swords of both Greece and Crete were imports from Cyprus is therefore considerably strengthened.

The excavation last century of the Dipylon graves and others of Geometric date in Athens yielded several swords only one of which is now traceable; in most cases there is not even a description. Probably they were all of standard type; the best-preserved specimen from the Dipylon (Grave V) undoubtedly was.³ Graves IV and XVII produced specimens apparently too fragmentary for measurement;⁴ that from Grave V was c. 70 cm. in length. From a group of Early Geometric cremation graves situated between the Areopagus and the Acropolis came two iron swords which may possibly be in Berlin; these graves are earlier than those of the Dipylon.⁵

The Ashmolean Museum contains a fine specimen acquired at Athens by A. J. Evans in 1898; in view of the date it is more than probable that it came from the excavations either in the Dipylon or on the lower slopes of the Acropolis. Very nearly perfect, it measures in its actual state 70 cm. in length and in its original condition was probably about 3 cm. longer.

The tumulus of Halos, which covered a number of cremation interments, yielded in all eleven swords, several too fragmentary for reproduction, others nearly complete.⁶ They are divided into two classes, narrow-bladed and broad-bladed, the latter having a very slight midrib, the former one more pronounced. The average length of both classes seems to have been 75-6 cm., but the longest example of the narrow-bladed, though not quite complete, measured 91 cm. All the Halos swords belong to the eighth century.

Swords as depicted in battle-scenes on Late Geometric vases agree very well with what is known or can be inferred from the actual specimens. The length accords in many instances with that of c. 75 cm. which seems to be a standard measurement, though not necessarily the only one. On some of the funeral vases the mourners wear a very short sword.⁷ This is

¹ *Eph. Arch.*, 1904, p. 38.

² *Vrokastro*, pl. xxxiv, 1 and 3.

³ *AM.* xviii (1893), p. 108.

⁴ *Ibid.*, pp. 107 and 133.

⁵ *Ibid.* xxii (1897), p. 478. Here we are told that the graves numbered six, and yielded two iron swords, one iron knife, and a bronze spear-head; a brief notice in *BPAW.*, 1898, p. 318 adds the information that all the graves contained cremations. No swords from Geometric graves in Athens are now traceable in the National Museum there. One reputed to be from Amorgos and two of unknown provenance were there in 1911 (see Wace, *RSA.* xviii, p. 28, nn. 3 and 4).

⁶ *Ibid.*, pp. 26-8, and fig. 15, nos. 1-3.

⁷ *P.* et *C.* vii, p. 159, fig. 42.

probably the μάχαυρα twice mentioned in the *Iliad*¹ as worn by a hero hanging beside his great sword; even in the age of τοῦ σιδηροφορεῖν it seems unlikely that anything more cumbersome would be worn continually. Some of the figures on a fragment in the Louvre wear both a short sword and a small knife,² and others on an oinochoe in the Lambros collection combine with a long sword a μάχαυρα not to be distinguished from a short one.³ A few of the swords in vase-paintings are notably long,⁴ though hardly up to the giant sword of Halos. They are used indifferently for cut⁵ and thrust.⁶

After the Geometric age the sword declines, apparently, in size and perhaps also for a time at least in importance, a natural consequence of replacing the pair of throwing-spears by the single heavy thruster of the hoplite. Evidence is at first scanty; there are no actual examples, and proto-Corinthian artists very rarely depict it and only in mythological scenes. In the Rape of Helen⁷ on an aryballos Peirithoos brandishes an enormous sword, evidently for a slash, and on another Zeus carries a good-sized one by his side,⁸ but it does not figure even in those battle-scenes which are heroic rather than realistic in type. On the body of the Hymettus amphora⁹ there are a number of swords of various sizes, both small and average, on the body; in one of the neck-panels one combatant has one of exceptional size. Throughout the seventh century evidence remains scanty, but Herakles on the Netos vase¹⁰ has a sword of very moderate length and rather narrow blade, and uses it for a thrust.

Since the bronze and iron swords of Greece are both cut and thrust swords, differing indeed in nothing but material, and since in Homer the bronze convention governs the sword as it does the spear, there is little hope of distinguishing different elements in the tradition about it which has come down through heroic poetry. There is no trace of the long rapiers or the inlaid dagger-blades of the Shaft-graves. There is, however, a thrice-used formula of pursuit which should logically be applicable only to thrusting-swords—*ῥέσσοντες ἐῖπεαί τε καὶ ἔγχεσι* (*N* 147, *O* 278, *P* 731); for *ῥέσσειν* is not a neutral verb of wounding, but is definitely used of thrusts and thrusts only,¹¹ whereas a man who had a cut-and-thrust sword, especially if it were of some size, would naturally use the edge in pursuit.

¹ *I* 271-2, *T* 252-3.

² *P.* 157, fig. 12 *infra*.

³ *AM.* xliii (1918), pl. 111.

⁴ e.g. *Hesperia*, Supplement II, p. 63, fig. 43, neck-panel; Hampe, *FGS.*, pl. 23.

⁵ Fig. 12 *supra*.

⁶ *Arch. Zeit.*, 1885, pl. viii = *P.* et *C.* vii, p. 181, fig. 66; *Bull. Mus. New York*, xxix (1934), pp. 169 ff., figs. 1 and 2; Hampe, *op. cit.*, p. 88, fig. 31, where one of a pair of combatants thrusts and the other slashes.

⁷ *Iohannan, VS.*, pl. xcii. 1 c.

⁸ *Ibid.* 2 d.

⁹ *Jb.* ii (1887), p. 43, pl. v;

for details see *BSA.* xlii, p. 86, fig. 4.

¹⁰ *Ant. Denk.* i. 46, pl. lvii; *Muz.* 83.

¹¹ *Dakros* and *ῥέσσειν* are used of spear as well as sword and cannot therefore of themselves imply a slash. *ῥέσσειν* appears to be a verb of general significance, meaning *smite*. The nature of the sword-stroke must be determined by the context.

as Eurypylus does in *E* 81. Probably, however, the verb is determined by the second noun, ἔγχεσσι, the dominant weapon in Homer. There is no doubt that the slash greatly predominates in Homer and that the sword principally in use was large and heavy. This differentiates the warfare of Homer from that of later Greece when the intrusive Central European form went out of favour, though the shorter sword of the classic age could be used with the edge as well as the point.¹ It may be doubted whether some of the feats ascribed to the Homeric sword, such as taking off at one blow a head or an arm at the shoulder,² could have been achieved with any of the weapons found or any in existence whether in the Late Bronze or the Early Iron Age. The iron sword, however, which attains the greatest known length and also is of greater rigidity and may have been able to take a sharper edge than bronze, comes nearer to the ideal than its bronze counterpart. It is probable, therefore, that Homer is thinking entirely in terms of the contemporary iron sword, which had been in existence long enough to have legendary feats ascribed to it. No Trojan hero is permitted to perform these outstanding exploits, but Trojan swords are apparently assumed to be of the same type and at all events deliver slashes. Twice a 'great' Trojan sword is described as Thracian (*N* 577, *Ψ* 808); the Dii may already have been using the weapon characteristic of them in the fifth century (see n. 1).³

The thrust is no less plainly recorded in the Homeric poems; instances are to be found in *Υ* 469-70 (but 475-6 and 481-2 describe slashes with the same weapon), in *Φ* 116-17 and 180, and in *Δ* 531.

This combination of qualities corresponds to what we have seen on Geometric vases, except that on these the swords are mostly of a moderate size. Victors seize their opponents by the plumes of their helmets as a preliminary to dealing the death-blow (Fig. 12 *supra*), which implies a fairly short blade, whether used with edge or point. In Homer, too, however, certain actions are performed which would at least be much easier with a sword of moderate length, e.g. the deadly stab above the collar-bone familiar in red-figured vase-painting (*Φ* 116-17). Twice moreover the sword is used to cut the traces of a horse, an awkward operation with a claymore,⁴ nor can the sword with which Agamemnon saws off the head and arms of a corpse lying on the ground have been of extreme length.⁵ A great sword, however, is one of the proper attributes of a hero, and μέγα is one of its most frequent epithets.

¹ So at least we should infer for the fifth century on the evidence of vase-paintings. For Xenophon, however (*Περὶ ἱππικῆς*, xii. 11), the *ἐπίστρο* is a weapon used only with the point; the mounted soldier, who has to use the edge, must have a *μάχαιρα*. This is not the Homeric knife, but a weapon of some size, as doubtless was that of the Thracians (*Dians*) described as *μαχίροποδες* (*Thuc.* ii. 96, and vii. 27). A slashing-sword, the *xeris*, was in use (*Xen.*, loc. cit.), but it was one-edged and could not be used with the point. It is not common in vase-painting and probably was not popular.

² See, e.g., *E* 81 and 146, *Σ* 496, *Π* 339-40.

³ We may note the one-edged iron sword, probably of the seventh century, found at Chalcitza in Macedonia. *BSA.* xxvi, p. 21, pl. ii, 1 a.

⁴ *Θ* 87-8, *Π* 473-4.

⁵ *Δ* 146.

There is no example of a sword-fight in Homer or of anything more than a stroke apiece, and though there is a duel in the funeral games, it is fought with spears. This is remarkable, for the sword duel seems to have been practised both in the Bronze and the Iron Age, and in both cases with the point. On a LH III seal-stone from Athens¹ two combatants, each clutching his opponent by the head, seek with the point of a short, pommel-hilted, horned rapier for the fatal spot under the fifth rib. A curiously similar sword-duel occurs on a Geometric vase from an Attic grave;² other features in the design suggest that possibly a series of events in funeral games is depicted. A duel with the point is also found on a Boeotian fibula of the seventh century.³ There appears to be no example in Geometric art of the spear-duel which is so common in epic battle and in seventh-century vase-painting. Only in two passages does Homer give a hint of a sword-duel. The first is in *H* 273 when Hector and Aias are separated; *καὶ νῦν κε δὴ ξιφέσσ' αὐτοσχεδὸν οὐράζοντο*; they would have fought with the points for *οὐράζειν*, predominantly the verb of the spear, appears to be used only of thrusts. The second example is in *P* 530.

Homer uses three words for sword, *ξίφος*, *ἄορ*, and *φάσγανον*. They have for him no difference of meaning, since within the limits of one brief passage (*Y* 469-81) all three are employed to denote a single weapon which in the same passage is used with both point and edge. Metre presumably was the determining factor in establishing the three terms in epic vocabulary.

Like *ἀορίς* and *θώρηξ*, *ξίφος* is a word of unknown origin which continues to be used throughout antiquity to denote in verse and prose alike an object which in essentials remained the same. It may well belong (though there is of course no proof that it does) to the language which the Greeks found spoken in Greece on their arrival there—or, it may be safer to say, to one of them. *ἄορ* and *φάσγανον* are said in the *Γλώσσαις κατὰ πόλεις*⁴ to be respectively Arcadian and Cypriot, a statement which, if correct, means that in Homer they are relics of the Achaian speech of the Bronze Age. *ἄορ* probably comes from the same root as the verb *αἰρεῖν*, which, however, implies no more than that it was carried on a belt or baldric. In Homer the sword is always slung from the shoulder, as on Bronze Age monuments,⁵ according to the testimony of the arming-scenes (*Γ* 334, *A* 29,

¹ Bossert², 398 b. A remarkably similar group occurs on one of the small orthostats from Tell Halaf suggesting that the type was traditional in art and became widely diffused. The subject has reminded more than one archaeologist of the duels fought by the men of Abner against Joab's, twelve on each side. 'And they caught every one his fellow by the head and thrust his sword in his fellow's side; so they fell down together' (2 Sam. ii, 16). It has been suggested that the Israelites learned this form of duel from the Philistines, who came from the Aegaeon or near by. Cf. the short stabbing swords carried by two young men in civilian dress on a LH III sherd from Ugarit (Pl. XXVII, 3). The allusion in *H* 273 may be of Cypriot origin.

² Hampe, *FGS.*, p. 25, fig. 6 = P. et C. vii, p. 255, fig. 130.

³ Bekker, *Anec.*, p. 1095.

⁴ P. et C. vii, p. 181, fig. 66.

⁵ Figs. 5 and 8.

II 135, T 372); on Geometric vases it is occasionally slung from the shoulder,¹ but generally attached to the waist. A twice-used formula² containing *ἄορ* may go back to the Bronze Age, since it implies the use of the single thrusting-spear; the hero has *ἐγχος* and *ἄορ*, but if he wants a missile weapon, he must content himself with stones.

φάσγανον appears also to be of Greek origin and to be connected with the verb *σφάζειν*. Strictly, *σφάζειν* means to cut the throat and in Homer is used only of slaughtering cattle. In post-Homeric Greek the use of *ἄορ* and *φάσγανον* is restricted to poetry; as in the case of *ἀσπίς* the word of non-Greek origin survives in ordinary use.

The most frequent epithets of the sword in Homer, apart from *δξύ*, are *μέγα*,³ *χάλκεον*, and *ἀργυρόηλον*. The first suggests that a long sword was preferred at all stages of the heroic tradition, and we have found such to be available throughout the Late Bronze and the Iron Ages, side by side with a smaller make. At the beginning of the latter period *χάλκεον* became a merely conventional epithet; in one formula, however, the line and a foot devoted to the sword in three out of the four great arming-scenes, it is associated with an adjective which takes us back to LH I or II.

ἀμφὶ δ' ἄρ' ὤμοισιν βάλετο ξίφος ἀργυρόηλον
χάλκεον (Γ 335-6, II 135-6, T 372-3)

Rivets with silver-plated heads for attaching the handle-plates of swords or more rarely of knives occur in the Shaft-graves,⁴ in four out of the five which contained the remains of men. Though less common than gold-plated rivets, they are fairly numerous, and must therefore have been esteemed and well known in LH I. Gold-plated rivets continue to occur throughout the LH period, being found in LM II graves near Knossos⁵ and in the King's Tomb at Dendra,⁶ which falls at the beginning of LH III. As this wealthy grave contained a good deal of silver, the absence of silver-plated rivets must be due to a change of fashion. The use of gold for this purpose continued, for even in the LM III tomb A at Moulidianá⁷ a gold-plated rivet was found clinging to the hilt of one of the bronze swords. The next silver-plated rivets known are attached, together with the remains of ivory handle plates, to the hilts of two iron swords of the seventh century from Cyprus, one in Berlin, one in the Cesnola Collection in New York.⁸

¹ Hampe, *op. cit.*, pl. 23. The regular word used for belt and baldric is *τελαμών* (H 394 = Ψ 825, Σ 401. *δορτῆρες* in A 31 is probably correctly explained by Hesychius as *σφραγίδος τῆς θήκης*. There is no plausible explanation of the plural on the hypothesis that the word means *τελαμών*. *δορτῆρ τελαμών* (A 609) rather suggests that to be so understood the word requires further definition. Here the baldric intended is presumably that which supported the quiver of Heracles. ² A 265, 241. ³ With *ξίφος* *passim*, with *φάσγανον* Ψ 824.

⁴ Schachinger, p. 105, nos. 465-6, Gr. IV; p. 139, no. 766, Gr. V; p. 161, no. 996, Gr. VI; p. 71, nos. 221-5, Gr. II (knife). To these it is now possible to add a dagger and a broad-bladed knife from Chamber tomb 8 at Dendra. They date at latest to the first half of LH II (NT, pp. 43 and 45, fig. 48).

⁵ Prehist. Tombos, pp. 59-7, 60.

⁶ Eph. Arch., 1904, p. 28, fig. 7.

⁷ RT., pp. 34-6, nos. 9-12.

⁸ Cat. Cesnola Coll., p. 463, no. 4727; cf. 4726.

That the rivets of Agamemnon's sword in the fourth arming-scene are golden is not surprising, considering the number of innovations incorporated in that passage and the obvious desire for magnificence; earlier in the poem (*B* 45) he has a silver-studded sword like other heroes.

ἀργυρόηλος is not merely distributed through the poems as an epithet of the sword; it is also a stock adjective applied to θρόνος.¹ Penelope's κλισίη inlaid with ivory and silver² is a piece of furniture of the same sort, and a line (*ψ* 200) has been absurdly interpolated into the recognition scene to make the ultra-primitive bedstead of the young Odysseus, for which parallels of a sort can be found in Chios at the present day, more worthy of its epic rôle. Archaeological parallels for this kind of Homeric furniture are to be found in the carved ivory panels and ornaments found at Nimrud, at Samaria in the 'ivory house' of Ahab, and at Arslan Tash. These ivories date to the ninth and eighth centuries.³ Similar specimens have been found sporadically in Cyprus, Rhodes, and Crete,⁴ and justify the conjecture that the throne which Midas sent to Delphi was of this sort.⁵ We have at present no archaeological warrant for silver inlay. ἀργυρόηλος, whose metrical convenience as forming the end of a hexameter had no doubt contributed to preserve it in a situation in which it had long been out of date, thus acquired an apt application to articles in contemporary use.

This, however, is a digression; there can be no doubt that the word as an epithet of the sword goes farther back in epic tradition. We must note firstly that the epithet which on our evidence would be the most obvious—χρυσόηλος—was barred, inasmuch as it could find no place in the hexameter; ἀργυρόηλος, on the other hand, besides its contribution to a stock line, repeatedly forms part of a useful termination—ξίφος ἀργυρόηλον (*θ* 406, 416, κ 261, λ 97, *Γ* 361, *H* 303, *N* 610), always in the accusative case. In *E* 405 we have a unique genitive combined with a different noun—φάσγανον; the situation, in which the body-shield plays a part (*p.* 181 *supra*), is not a stock one in either *Iliad* or *Odyssey*. Conceivably we have, as in the case of the boar's tusk helmet, a fragment of Bronze Age heroic poetry. In *Ψ* 807, where we have φάσγανον ἀργυρόηλον in the accusative at the end of the line, the case is different. The preceding line was athetized by Aristarchus and lies under just suspicion, inasmuch as part of it is borrowed from *K* 298; over how much of the passage the suspicion should extend there is nothing to show. 807 cannot be excised by itself; we may suspect that it illustrates the way in which epic tradition must have perpetually renewed itself.

¹ *E* 359, *η* 162, *θ* 65, κ 314, 366, λ 341. The solitary example of such a piece of furniture in the *Iliad* is in the house of Hephaistos; gods tend to be less conservative than heroes in their belongings. ² τ 55-6.

³ R. D. Barnett, *Iraq*, ii, pp. 130-5; Layard, *Nineveh and its Remains*, ii, pp. 8 ff.

⁴ See Barnett, *loc. cit.*, p. 182, n. 1.

⁵ Herod. i. 14.

The remaining epithets are not very informative. *ταυρήκης* (with *δορ*)¹ may mark the coming of the slashing-sword, sharp along the edges and not merely at the point; *ἀμφήκης* indicates the same characteristic.² The quality is emphasized in the phrase *φάσγανον δξύ | χάλκεον, ἀμφοτέρωθεν ἀκαχμένον* (χ 79-80).

The sword of Eurýalos, *δορ παγχάλκεον, ᾧ ἐπὶ κόπῃ | ἀργυρέη, καλεὼν δὲ νεοπρίστου ἐλέφαντος | ἀμφιδεδύηται* (θ 403-5), is something of a curiosity. From the days of the Shaft-graves onwards the hilt as well as the blade was of bronze, with the single exception of the handle-plates, which were invariably of some perishable material. In central and especially in northern Europe there is a series of 'all-bronze' swords, whose hilts, entirely of bronze, are made separately from the blade and attached to it by rivets.³ At the very end of the Bronze Age there is a second series of swords, found principally in Switzerland and France, whose hilt is cast in one piece with the blade;⁴ sham rivet-heads occasionally survive as decoration. As for the silver hilt, though gold-plating of the entire hilt is common throughout the Late Bronze Age in Greek lands, specimens being found in the Shaft-graves, in the graves of Knossos already quoted and in the King's Tomb at Dendra, no example of silver-plating has occurred belonging to this or any other period. Probably certain ancient scholars were right in thinking that *ἀργυρέη* is here merely a rough equivalent for *ἀργυρόηλος*.⁵ Nor are ivory scabbards known, though remains of wooden examples and, more rarely, of textile linings have been found in these same tombs. If ivory scabbards had been in use, ivory fragments might have been expected to survive in one grave or another; but here also there is a complete lack of evidence in all periods. No bronze sword of either of the types described has occurred in Greece. If Homer is describing a foreign rarity, such as a traveller to Scherie might be expected to bring home, he must have used a tradition handed down from the Bronze Age, for (apart from the question whether *παγχάλκεον* could be used to describe specifically a sword which was in fact *παναιδήρεον*) there is no iron sword of this strictly 'all-metal' type.

To *κωπήεις*, which is thrice used as an epithet of the sword, once (*O* 713) in conjunction with the mysterious *μελάνδετα* and also in *II* 332 and *Y* 475, it is difficult to assign any precise meaning. It should describe a sword with a conspicuous hilt and, so far as can be judged, would be most appropriate to the long rapier with its large pommel. It is on the whole rare for the slashing-sword, whether of bronze or iron, to have a pommel-spur, and there is no instance in which any trace of the pommel has been preserved; presumably it was of wood. So also, often enough, was the

¹ *Σ* 385, *II* 473 = *κ* 430 = *λ* 231. With *ἐλέαν*, χ 443.

² *K* 255, *Φ* 118, *π* 80, *δ* 341.

³ Naue, *Vorhistorische Schwerter*, pls. xxvii, xxviii, xxix, 1-6.

⁴ *Op. cit.*, pl. xxxvi.

⁵ Schol. BT ad *A* 219. It should be noted that *κωπή* in the sense of 'hilt' occurs only three times in Homer, in *A* 219, and θ 403-4, with the epithet *ἀργυρέη*, and in *λ* 531 alone.

pommel of the rapier; in that case it was gold-plated. Many were of ivory, and the Shaft-graves yielded a substantial number of examples of alabaster.¹ Only these last are heavy enough to counterweight the blade behind the hand, which one would have supposed to be the function of the pommel, important in the case of the rapier and alien to the slashing-sword.

Alternatively, *κισπήεις* may possibly mark that transition from the blade with a short tang inserted into the hilt to the type in which the blade itself is prolonged, narrowed down and thickened, flanged and provided with handle-plates, thus becoming for the first time a reliably hilted weapon—a transition which, as we have seen, was well on its way in the period of the Shaft-graves. There is nothing known to us which associates the epithet with the slashing-sword, and its rarity may indicate that it was fading out of the epic vocabulary.

One unique and obscure epithet—*μελαινδερον*²—remains for consideration. Its only possible meaning is 'with black binding round the hilt', a feature which we have no means of connecting with any Aegaeon sword. The hilt of the second of the 'all-bronze' types described above is sometimes decorated with transverse ribbing which looks like the fossilization of a cord wound round the hilt to give a good grip. A leather thong used in this way would soon be blackened by the sweat of the hand. This is the explanation put forward by Leaf, *ad loc.*, without reference to the sword-types described above. Obviously, we lack material for even a conjecture; but we may remember that the Achaean of the Late Bronze Age travelled and probably fought far afield, and must have become acquainted with many foreign weapons.

8. THE BOW

In the eastern Mediterranean region the two great species of bow are discernible in ancient times—the single-stave or 'self' bow with its subspecies the reinforced or compound, found in Africa and Europe, and the composite or Asiatic bow. The former is of one material, which in the regions here concerned is wood, and it consists either of a single stave or, if it is compound, of two or more securely joined. Both species can be seen on Egyptian monuments, but the composite is always associated with foreigners.

The composite bow remained in use in many parts of Asia in recent times; there are abundant specimens extant and these, in the Near Eastern parts which alone concern us, consist of three main materials—a wooden stave

¹ *Schachtel*, p. 108 f., nos. 485-9; p. 130, no. 778, fig. 57. *ἀμφιδέδιον* is a curious word to apply to a scabbath. Its only other appearance is in *V* 562, where its meaning is similarly obscure; see Leaf, *ad loc.* That ll. 561-2 are late is shown by the admission of a metal corset.

² *O* 513. The tragedians used the word, obviously without knowledge of its meaning in Homer; it may have been more extensively used in the Cycle. Euripides has it three times (*Phoen.* 1091; *Or.* 821, frag. 373 Nauck²), in all cases of swords and with the meaning 'blood-stained', probably also in all cases. Aeschylus uses it once of a shield (*S.c.Th.* 43), possibly with the same meaning.

along the inner face of which (the belly) strips of horn, i.e. of the highly flexible sheath of true horn or keratin which encloses the osseous core of the 'horn' of ordinary parlance, are let into a groove, while along the back dry sinew is moulded and protected from damp and concealed from sight, generally in the regions concerned with some kind of bark, and finally the whole is securely lashed together.¹ The innermost ingredient, the horn, more flexible than wood, takes the severest share of the crushing which the whole structure undergoes when the bow is bent and which can be much greater than a self or even a reinforced bow could withstand. The outermost, the sinew, is more tensile, and thus a bow is provided which can be bent to a considerably greater degree than a bow which, simple or reinforced, is of uniform material throughout. Consequently the range and penetrative power of the arrow are considerably greater than could be obtained from even a reinforced bow of the same size.

An ancient bow, almost certainly Assyrian, from an Egyptian tomb of the XXVIth Dynasty² has been found to consist of the above materials arranged in the manner described; it is a fair assumption that composite bows represented on ancient monuments record bows of similar composition.

The late H. Balfour devoted two articles of the first importance to the study of the composite bow. In the first³ he expounded its structure and characteristics; in the second,⁴ by an examination of the data afforded by the epics, he established the composite nature of the bow recorded by Homer. On these the following study is principally based; it is necessary, however, to introduce it by a more detailed review than their scope demanded of the evidence respecting the bow in the Aegaeon area throughout the Late Bronze and the Early Iron Ages.

In the Bronze Age the bow rarely appears on monuments of mainland or Cretan art. It is found in hunting-scenes on two Mycenaean monuments, a gold ring from Shaft-grave IV (Fig. 38, p. 311) and the Lion-hunt

¹ It is unnecessary for our purpose to consider bows into whose composition metal entered. Such, however, existed, for a find of bows partly made of bronze is recorded from Nuzi in N. Syria; R. F. S. Starr, *Nuzi*, i, p. 341, and cf. W. M. Müller, *Asien u. Europa*, p. 304.

² Now in the Pitt Rivers Museum, Oxford. It exhibits a highly anomalous feature in the shape of a strip of horn down the back in addition to the sinew. Balfour states (*JAI*, xxvi, pp. 210-20) that he had examined scores of composite bows of the normal constituents and had never encountered a similar example.

³ 'The Structure and Affinities of the Composite Bow', *ibid.* xix (1890), pp. 226 ff.

⁴ 'The Archer's Bow in the Homeric Poems', *ibid.* li, pp. 289 ff. To this may be added another, *ibid.* xxvi, pp. 210-20, in which the structure of the bow in the Pitt Rivers Museum is described. Valuable matter is also to be found in a paper by Longman published with a report on the ensuing discussion, *ibid.* xxiv, pp. 55 ff. *The Projectile-throwing Engines of the Ancients* (Sir Ralph Payne-Galwey, Longmans, Green & Co., 1907) contains a chapter on the Turkish bow, the supreme achievement of the bowyer's art, in the use of which the author was an adept. *Bogen und Bogenschützen bei den Griechen* (A. Schauberg, 1910) and *Bogen und Pfeil bei den Völkern des Altertums* (E. Buland, 1913) contain helpful collections of material; H. Bonnet (*Die Waffen der Völker des alten Orients*) has a careful and detailed study of the bow and its adjuncts in the regions concerned (pp. 118-87).

dagger-blade.¹ In both cases it is unmistakably of European type: on the dagger-blade it is small, and in each case the draw is evidently meant to go no farther than the breast, if as far. Arrow-heads, some of obsidian probably imported from Melos, some of flint, were found in Shaft-grave IV and some of the chamber-tombs of Mycenae; other sites have now added their quota.² Flint is scarce in Greece and poor in quality; the flint heads were almost certainly imported from Egypt,³ a point which would testify to some interest in the use of the bow. Arrows so tipped, however, are not likely to have been used in war; nor is there much significance in the pair of arrow-shaft smoothers found in Shaft-grave VI, save as they testify to trade relations with the north and west.⁴ In LH III bronze arrow-heads occur on a number of sites,⁵ mostly in small quantities, but again there is no evidence that they were used for anything but hunting.

In Crete, the meeting-place of immigrants and influences from north Africa and Anatolia, we may expect to find a mixed record. Representations of the self-bow are found in MM times, chiefly, perhaps exclusively, in a peculiar form known in predynastic Egypt which has an inward curve at the handle.⁶ Subsequently it is superseded, probably through Anatolian influence, by the composite bow which first appears with markedly reflexed tips as a sign on the almost certainly Anatolian disk of Phaistos, which is of MM III date.⁷ It is next found as the weapon of a young male figure, probably a god, on a clay sealing.⁸ The weapons of a god are not unimpeachable testimony for those of his votaries, but there is a neat piece of indirect evidence for the use of the composite bow in Crete.

At Knossos sealings and tablets on which is preserved part of an inventory of the Palace stores were found, some bearing the mark of an

¹ The figure of the archer on the dagger-blade is reproduced on an enlarged scale, *P. of M.* iv, p. 373, fig. 557, the engraving on the ring *JHS.* xlv (1925), p. 34, fig. 35.

² A list of find-spots complete up to 1932 is given by Wace, *Ch.T.*, pp. 59, n. 6 and 187; it includes Thebes, several Peloponnesian and Attic sites, and Knossos. It is now possible to add Prosymna (*Prosymna*, pp. 340 and 455); Dendra (*RT.*, p. 103, and *NT.*, pp. 30 and 48), Asine (*Asine*, p. 390), and Malthi (*The Swedish Messenia Expedition*, pp. 357 and 370).

³ *Ch.T.*, pp. 222-3.

⁴ *Schachtel.*, p. 163, fig. 79; C. Hawkes, *The Prehistoric Foundations of Europe*, p. 350, fig. 27 b 4.

⁵ These sites are included in the list given above. On the question of military use, however, it may be noted that in the opinion of K. Müller certain features of the fortifications of the west staircase at Tiryns are best explained as designed to enable archers to protect the line of communication with the most probable source of the water-supply. This lies at a distance of 80-100 metres, a distance certainly beyond the effective range of the European bow as we have seen it on the monuments (*Tiryns*, iii, pp. 49 and 66-7).

⁶ *P. of M.* ii, p. 48, fig. 23 a, b, and c, and cf. p. 50, fig. 23 bis; Wolf, p. 56, fig. 36. The bow of the Boy-god on a gold ring in the Ashmolean said to be from the Vapheio tomb may be of this type (*P. of M.* ii, p. 842, fig. 557).

⁷ *Ibid.* i, p. 652, fig. 423, no. 11. With this form may be compared the Palestinian or Haru bow of certain Egyptian monuments, which, however, is possibly reinforced with metal (W. Max Müller, loc. cit.).

⁸ *P. of M.* i, p. 680, fig. 500 f. Only part of the bow is visible, but enough to guarantee the recurved tip.

arrow-head, and in the immediate neighbourhood two large deposits of bronze arrow-heads were unearthed. Other tablets bore unmistakable representations of the horns of the Cretan wild goat, which in this context, as Evans points out, can only symbolize one of the raw materials of composite bows.¹ On the other hand, on a signet from Cydonia an archer accompanied by a man with an eight-shield attacks a lion with what is, if so small a representation may be trusted, a European bow of exceptionally small size. The resemblance of the design to part of that of the Lion-hunt dagger-blade is, however, so close that it can only be accounted for by ultimate derivation from a common original, possibly to be sought in Egypt.² The Knossos arrow-heads are mostly small and better suited to hunting than war, and on a Cretan carnelian the bow appears in the hands of the Great Goddess,³ no doubt in her character of huntress. On a fragment of a steatite vase from Knossos we have a unique instance of the bow in military use, and here it is unmistakably a large self-bow. An



FIG. 35

archer who is apparently a figure in a siege scene is represented disembarking from a boat; he shoots upwards, presumably aiming at a defender on the rampart (Fig. 35).⁴ The man is bearded and consequently not a Minoan;

¹ *Ibid.* iv, pp. 832-7, figs. 813 and 816.

² *Ibid.*, pp. 575-6, figs. 596-7.

³ Furtwängler, *Antike Gemmen*, pl. ii, no. 24; Bossert¹, 396 f. The bow appears to be of the predynastic Egyptian type noted above, in which case its association with the goddess is no doubt due to religious conservatism.

⁴ *P. of M.* iii, p. 106, fig. 59 (LM II). The bows on the silver Siege vase from Shaft-grave IV (inadequately rendered, but certainly composite) do not concern us here, since the archers are neither Minoans nor Mycenaeans.

he wears, not the Minoan loin-cloth, but the bathing-drawers of the Lion-hunt dagger-blade and is in all probability a Mycenaean.¹

This is the sum of the evidence which the Late Bronze Age affords regarding the use of the bow in the Aegaeon area. In Cyprus the Achaeans can hardly have remained ignorant of the Oriental bow used, e.g., by the hunting king on the Enkomi draught-box,² but in spite of the Mycenaean features manifest in that design there is no evidence that it was executed in the island and not rather on the Syrian coast. The bow—and it can only have been some form of Oriental bow—is an important element in the inventory of the arsenal at Ugarit,³ and though that document does not concern the Mycenaean settlement there, Mycenaeans sometimes encountered the Oriental weapon with fatal results.⁴ There is no indication that they learned to use it.

The proto-Geometric period is an all but total blank; no arrow-heads are reported from the cemetery of Assarlik, nor, somewhat surprisingly, from Vrokastro or the proto-Geometric cremation at Moulianá, all of which yielded weapons in considerable quantities; on the cremation urn from Moulianá warrior and huntsman alike are armed with the spear. From the Kerameikos, however, comes a single iron arrow-head of Mycenaean type, found in the goods accompanying a cremation urn, which included an iron sword and knife.⁵

The earlier part of the Geometric age is equally barren; but in the battle-scenes characteristic of Late Geometric vase-painting archers make their appearance armed, some with the composite, some with the simple bow. The following are examples of the first class so far as published:

1. Fig. 12, p. 157 *supra*. Land Battle; in upper register archer (5th figure from r.) shoots to r. with small double-curved bow; immediately in front of him man falls, with head transfixed by arrow. An archer with a similar bow is described Pottier, *Vases du Louvre*, A 528.
2. *Arch. Zeit.* 1885, pl. viii, 1 = P. et C. vii, p. 179, fig. 63. Attempted landing from ship; on each side archer shoots arrow from bow with double curve. See Fig. 13, p. 157.
3. *Bull. Met. Mus.*, N.Y. xxix (1934), p. 170, fig. 1. Attempted landing; archer on deck aims arrow from large bow with double curve.
4. *Eph. Arch.* 1898, pl. v, 1 and 1 a. Vase in Copenhagen. *Obv.* Archer on deck aims arrow at man with Dipylon shield on shore. Bow extremely small, no double curve is indicated. Tips reflexed facing away from archer.

¹ For the beard at Mycenae cf. the mask from Shaft-grave V (*Schachtgr.*, p. 121, no. 624, pl. lii; Schuchhardt, p. 253, fig. 254), the silver cup with inlaid bearded heads from a chamber-tomb (*Eph. Arch.*, 1888, pl. 7, no. 2; Bossert³, 153-5), the Warrior vase, and the 'groom' sherd (Pl. XII, 1).

² Pl. XI, 1. The draw is the non-Greek draw to the ear, and the bow is bent to a degree which would snap a 'self' bow of wood.

³ *Syria*, xx (1939), p. 279.

⁴ An arrow transfixing two of the dorsal vertebrae of a skeleton was found in a Mycenaean grave on the site. *Loc. cit.*, pp. 280-1. The find dates to the first half of the fourteenth century.

⁵ *Ker.* iv, pp. 27 and 35, pl. 38.

a feature not found on any of the European examples examined below, which also appear to be larger. *Rev.* Two archers with similar bows shoot at each other over bodies of slain. Pl. XX, 1 *a* and 1 *b*.

Bulanda (p. 84) adds a Geometric scyphus (unpublished) in the National Museum at Athens (inv. no. 194) decorated with a frieze of seven running men, six of whom carry bows of the type of no. 4 *supra*.

In all these cases the archer stands erect. The archer on the ship in no. 1 *a* wears the Dipylon shield; conceivably a man might do so in real life, since the shield would hang over his back and the draw with the Cretan bow is only to the breast, the bow being held as far forward as possible; but it seems improbable¹ and there is no other archaeological evidence for the practice except a man on no. 4 *infra*. On the same vase a figure on the extreme right equipped with Dipylon shield and two spears appears to be drawing a (fragmentary) bow. If this interpretation is correct, the scene cannot be true to fact; yet it is to be noted that Paris on his first appearance in the *Iliad* (I' 16-19) is armed with spears as well as bow and sword (cf., however, p. 295 *infra*).

The examples of the European bow in Geometric vase-painting are four; they are as follows:

1. *Argive Heraeum*, ii, p. 13 and pl. lvii. 10. Cf. p. 113. Parts of four figures advancing to l. The first two are preserved up to the neck, the third as far as the knees; of the fourth only a foot survives. Nothing can be said of the first save that he has no bow; presumably he held a spear poised above his head. The second figure, standing erect, aims an arrow from a bow of which only the lower half is preserved; it is clear, however, that it was not double-curved and that the tips were not reflexed. The remaining figures cannot have held bows, as the space is insufficient.
2. *Loc. cit.*, pl. lvii, no. 13. Design indistinguishable in the reproduction. Described as archer shooting with bow of same type as 1.
3. *Fouilles de Delphes*, v, p. 38, fig. 538. Very small fragment on which an archer, kneeling, aims large arrow from a small European bow.
4. Graef, *Vasen der Akrop.*, p. x, no. 291. Warrior with Dipylon shield behind which he apparently kneels aims large arrow from European bow. The presence of the shield is abnormal in the European, as that on 2 *supra* is in the Asiatic class. The fragmentary object opposed to him cannot be interpreted with certainty; Professor Beazley suggests to me that it may be the fore-part of a chariot horse, in which case the scene represents a land-battle, as do the other examples in this class.

It would seem that at this period, immediately before the introduction of hoplite armour, archery played a considerable part in Greek warfare.²

¹ With the Scythian bow, whose draw is to the shoulder, it is out of the question.

² Cf. Thuc. i. 49. 1 for an old-fashioned sea-battle with plenty of archers as well as other forces on the decks, showing that the practice prevailed till the introduction of the new Athenian naval tactics.

Apart from the number of examples the bow is represented as deadly in effect, and the extravagant size of the arrows, especially the heads,¹ testifies to the intimidating effect on the imagination rather than to dimensions verified by archaeology or possible in practice. Foreign influence is indicated by the occurrence of the composite bow; that it appears on our scanty list in two different forms is a remarkable fact. Since in two of our battle-scenes (2 and 4 *supra*) it appears on both sides, it must have been employed by Greeks; indeed, for anything we know, all these scenes may represent wars waged by Greek states against each other; but it is unlikely that the archers were Greeks, *Ἕλλησιν*, as Pausanias tells us, *ὅτι μὴ Κρητῶν οὐκ ἐπιχώριον ὄν τοξόειον*.²

This must mean that the European bow, probably still used by the Greeks of the fifth century, had ceased by Pausanias' day to hold a place among the weapons of war. This is only what we should expect; it is unlikely that it survived the opening of the Macedonian age. It is a reasonable conjecture that the composite bows of the Geometric vases are our earliest record of the employment of mercenaries by Greek states. That the mainlanders themselves adopted the composite bow is highly improbable. Such archery is not learned in a day; they would at least have had, like Cyaxares, to maintain systematic instruction by foreign experts.³ They probably continued to make some use of the native weapon and hired small forces of superior skill.⁴ If we admit the hypothesis of mercenaries, we naturally think first of the Cretans, though our earliest documentary evidence for their employment goes back no farther than the fifth century. We have reviewed the evidence for the use of the composite bow in Crete in the Bronze Age; that it was their weapon in historical times is certain. Xenophon's Cretans,⁵ though outranged by the large Persian bow, were able at once to utilize against the enemy any specimens which they captured, a feat impossible for men accustomed only to the European bow; they would probably have failed to string them. Archaeological evidence from Crete is poor. The Hunt shield from the Idaean cave (Pl. VIII, 1) and a fragmentary bronze relief of the seventh century from a tomb near Knossos both exhibit archers bending unmistakably composite bows (Pl. XI, 3),⁶ but both works are too completely dominated by the influence of Oriental models to afford any evidence on Cretan practice. Besides these two monuments there are two figures of huntsmen of Cretan workmanship cut out of sheet bronze, both of the

¹ To the battle-scenes enumerated we may add the solitary transfixed figure on a sherd in the Louvre. Pottier, *Cat. A* 560 = P. et C. vii, p. 174, fig. 57.

² i. 23, 4. It is perhaps significant that the four scenes in which the European bow figures on Geometric vases appear to be land-battles, i.e. both sides are Greek.

³ Herod. i. 73.

⁴ Cf. Thuc. vi. 43.

⁵ Anab. iii. 3, 7 and 4, 17.

⁶ KBR., Bell. 1, and JHS, lili (1933), p. 291, fig. 16. It will be noted that in these cases the draw is to the shoulder, whereas the Cretan draw is to the breast (c. *infra*, pp. 292-3) as accords with the small size of the bow.

seventh century. The first¹ has a composite bow (Pl. XXI, 1); he is engaged in a dispute with a youth who carries the game, and if Furtwängler is right in regarding the pair as Herakles and Apollo,² the bow has not much evidential value for Cretan practice, since that of Herakles is regularly composite. Yet it is not wholly without significance, for in black-figured vase-painting Herakles' bow is of the double-curve Scythian type which there is no reason to associate with Crete, whereas here it rather resembles the type on the Phaistos disk, and, as we shall see, is probably of Anatolian origin. The second figure³ appears to have a (fragmentary) bow of identical form; but it is impossible to judge from the reproduction.

Turning to the mainland, we find the European bow used on two proto-Corinthian aryballoi⁴ by archers who appear in conjunction with figures armed as hoplites. Archers are found on three Boeotian fibulae; the first two⁵ appear to use the European bow, but in view of the small scale and poor preservation certainty is impossible. On the third⁶ two archers are represented in mid-air over the deck of a ship shooting at each other, an abbreviated rendering of either a sea-fight or an attempted landing; both bows are unmistakably of the single-curve composite type. In all three cases the posture is erect.

Archers also occur among the lead figurines of Sparta. In the seventh century the bows are of European type and are held by male figures which kneel on one knee. The bow appears in two sizes, one small and one of exceptional size.⁷ This type survives into the sixth century,⁸ in which the Asiatic bow makes its first appearance; it occurs, however, only in connexion with the Goddess, erect and bending it, or Herakles, carrying his quiver, Greek fashion at shoulder height.⁹ The latter type continues in the fifth century.¹⁰ Except, therefore, in the cases of the belatedly Geometric and perhaps traditional rendering on the Boeotian fibula, the

¹ Lamb, *Gr. and R. Bronzes*, pl. xix.

² Roscher, s.v. 'Herakles', p. 2200. There is however no evidence to support the hypothesis other than the dispute over the tripod.

³ *JHS.* xxx, p. 227, fig. 1.

⁴ The earlier, from Perachora (*BSM.* xlii, p. 93, fig. 7), dates to c. 680, the other (Johansen, *FS.*, pl. xxxiii, 1 f) to the second quarter of the seventh century. On a third (*FS.*, pl. xxx, 1 b), roughly contemporary with the second, Herakles wields against the Centaurs a bow which is certainly composite. It has the somewhat swollen profile characteristic of a sinew-backed bow and a recurved tip seems to be indicated, though only very slightly. Moreover, it is bent to a much greater degree than the European bows on the other aryballoi, whose originals would probably have snapped under such a strain. Unnumbered as yet by his club, Herakles has drawn the bow which he generally holds merely strung; consequently it has assumed the crescent form common to all bows, simple or composite, in that condition, and it is impossible to say whether the artist thought of it as a Scythian bow or not.

⁵ Hampe, *FGS.*, p. 12, fig. 1, and pl. 6.

⁶ *Ibid.*, pl. 14. It may be noted that this fibula was found in Crete, and is of a somewhat different and more finished technique than the others.

⁷ *AO.*, pp. 262 and 269, pls. clxxxii, 16 and 17, and cxc, 18 and 19.

⁸ *Ibid.*, pl. cxcvii, 33 and p. 276.

⁹ *Ibid.*, pl. cxcvi, 2 and 3 and p. 271; fig. 125 k and p. 278.

¹⁰ *Ibid.*, pl. cxcviii, 18 and 19, and p. 278.

Cretan archer and the proto-Corinthian Herakles, the composite bow does not appear in the seventh century, and in the first two cases it is of the single-curve type; the third must remain doubtful. The European bow, to judge by the proto-Corinthian and Spartan examples, had some importance in real life, as would be the case if the *philoi* were for the first time being organized to give effective support to the recently established hoplite phalanx. The Homeric passage on the Locrian archers (*N* 714-21), which will be further discussed below, suggests that this was the case.

From about 600 onwards the double-curve bow appears in connexion with mythological or heroic beings, and especially with Herakles, Paris, and the Amazons (Pls. XXIII, 1, XXI, 2, XXII, 1). The varying use of the Scythian bow-case-cum-quiver¹ and the Greek quiver is of some interest. The Scyth wore his composite receptacle on the left side at waist-level attached to a belt;² the composite bow requires protection from smoke and rain, and the nomad must encounter the latter at least. Amazons regularly carry a case at waist-level;³ it is not always possible to say that it differs from a quiver, but it is always slung from the shoulder, presumably because the Greek used no waist-belt strong enough to support the weight. Herakles carries the quiver at shoulder- or waist-level indifferently; on a Euphronios vase it is shown laid aside with the bow strapped to it in the Greek manner (Pl. XX, 2).⁴ Once on a cylix by Brygos he appears in the guise of a Scythian policeman equipped with the combined bow-case and quiver, slung, however, from the shoulder (Pl. XXIII, 2).⁵ Paris on a Chalcidian vase draws his Scythian bow; he carries only a quiver, but it is slung low from the shoulder (Pl. XXI, 2).⁶

It is possible that a second variety of bow appears on the Melian amphora with Apollo and Artemis (Pl. XXXI, 2).⁷ It is carried by the latter and is manifestly composite, but to judge by the considerable part of it which is visible not necessarily Scythian. Another bow, much smaller, which she draws in a fragmentary Gigantomachy on a black-figured sherd from the Acropolis (Pl. XXII, 2)⁸ certainly is not. The name of the artist—*δ' Αὐδός*—suggests that the bow is Anatolian; the same type appears in the hand of Apollo on the Andocides vase with the combat of the god and Herakles over the tripod (Pl. XXIII, 1).⁹ Here the clearly marked casing of bark or leather and the recurved tips mark it as composite; it is strung, and the curve from tip to tip is uniform throughout. Its shape agrees with that of a Siberian bow figured by Balfour;¹⁰ no doubt it

¹ See the famous silver vase from Kul Obā (*CAH*, Plates, i, p. 253). Remains of the metal casings of these articles are known; see *op. cit.*, p. 255.

² *MuZ.* 314, 371, 395, 506, 507.

³ *Gr.Vm.*, pl. 23; *MuZ.* 401. Cf. *Cat. VBM.* ii, p. 15, fig. 24 (= B 101).

⁴ *Gr.Vm.*, pl. 47, 1; *MuZ.* 424.

⁵ *Mon. Inst.* i, pl. 51; *MuZ.* 163.

⁶ *Couze, Melische Thongefässe*, pl. 4; *MuZ.* 108.

⁷ *Graef*, pl. 35, 1; *MuZ.* 239.

⁸ *Gerhard, Vasen et Coupes de Berlin*, pl. xix; *MuZ.* 314.

⁹ *JAI*, xix (1860), pl. v, 3. For the bow of Apollo and Artemis see further in the note at the end of the chapter.

represents an Asiatic type which with minor variations had a very wide diffusion in ancient times. It is to this type that the bow of the Cretan archer in sheet-bronze belongs, and the probability is that it was introduced into the island from Anatolia in the Bronze Age.

The occurrence of the bow as a weapon of the Olympians is rare and of early date. It is that of Apollo and Artemis on an Attic vase of the 'Tyrrhenian' class (i.e. Attic of the second quarter of the sixth century) in the museum of Corneto¹ on which they are shown rushing forth to slay the Niobids; they both wear the Attic helmet, a very unusual feature probably intended to emphasize their Greek character despite their weapon, and they carry their quivers shoulder-high after the Greek fashion. On a black-figured lekythos of late date (c. 490) and careless execution² the baby Apollo is shown in the arms of Leto discharging at Python an arrow from a Scythian bow. This appears to be the latest example of the barbarian weapon in the hands of an Olympian and the treatment of the theme is at least semi-comic, as the résumé of his childish exploits is in the last chorus of the *Iphigenia in Tauris*. What caused the Scythian bow to fall into disrepute we cannot tell. Its dignity certainly could not have survived the installation at Athens of the Scythian corps of *τοξόται*, state slaves and police, but this event is commonly supposed and sometimes stated (without evidence) to have been a result of Perikles' demonstration in the Pontus shortly after 440, and the discarding of the bow by Olympus comes earlier than that. The career and end of the second Miltiades may have had something to do with it.

That our scanty list of examples should furnish us with two distinct types of composite bow is a remarkable fact. About the origin of the double-curve weapon there can fortunately be no doubt; it is Scythian throughout. The familiar 'Cupid's bow' form is unknown in the art of the Aegean and the Near East in the Bronze Age, nor does it appear on the Assyrian, Syro-Hittite, and other Near Eastern monuments which become available from the ninth century onwards. From the Geometric vases we get not merely our first, but our only direct evidence for its existence earlier than the sixth century. There is, however, another indication of the wide diffusion of the Scyths in the Early Iron Age over regions which gave them contacts with south-east Europe, including Greece. The triangular bronze arrow-heads associated with the Scyths occur at Hallstatt (though not earlier than in the

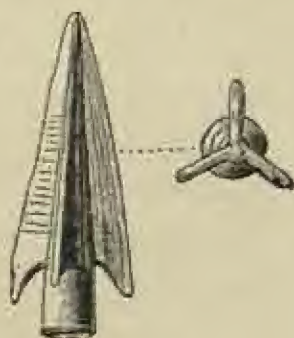


FIG. 36

¹ *Antike Denkmäler*, i, pl. 22; Roscher, *Lex. Myth.* iii, 1, s.v. Niobe und Niobiden, p. 398.

² *Étude Céramogr.* ii, pl. 1 a; *AMZ.* 284.

seventh century) and in Slovenia, as well as farther afield, and there is a group from places scattered over Greek lands—from Olympia, Attica, Megalopolis (Fig. 36), Kalymna, and the Idaean cave in Crete.¹ Olympia has furnished a fair number,² all of which belong to a group typologically somewhat later than the Hallstatt specimen, in that they all have shaft-sockets,³ but differing in other respects among themselves. It is impossible to prove that any one of these is of as early a date as the eighth century.

The date of the first appearance of the Scyths in south Russia is unknown. The Kimmerians first appear in Assyrian documents of the reign of Sargon II which show that by 714 they were established in the region of Lake Van; this suggests (if the tale of Herodotus be true) that the conflict between Kimmerian and Scyth in south Russia had begun and was going in favour of the Scyth. If this is so, the conflict must have continued throughout the seventh century; the Scyths never succeeded in conquering the Crimea. In these circumstances it is, as Rostovtzeff points out,⁴ not unnatural that they should have left in the lands where they ultimately established themselves no archaeological record datable to the seventh century when they were still nomads. Ionians and other Greeks, however, in exploring the north coast of the Aegean may have become acquainted with them. Homer knows the Thracians west of the Chalcidic Peninsula, as is shown by the stages of Hera's journey from Olympus to Ida, designed to reduce sea-crossings to a minimum;⁵ more than that, he knows the Mare-milkers somewhere in the appropriate region, distinct from the Thracians though like them *ἰπποπόδοι* and that at a date when Mysians still lived on the European side of the Hellespont.⁶ Our first archaeological evidence comes from the great series of Scythian tombs in south Russia, which does not begin till the sixth century.⁷ From the beginning of that century Athens may be presumed to have maintained intercourse with the coast whose hinterland was inhabited by the Scyths. Her determination to establish herself at Sigeum in order to secure the all-important corn supplies from south Russia was matched

¹ See Habert Schmidt *op. Pumpelly, Explorations in Turkestan*, 1904, pp. 183-6, and Flinders Petrie, *T. and W.*, p. 34, where the occurrence of triangular bronze arrow-heads in a number of Egyptian tombs is noted as following on the overrunning and occupation of Syria by the Scyths in 624.

² *Ol.* iv, 1083-92, pl. lxiv (Textb., p. 178 for many more in the inventory) and *Olympiabericht*, *Jb.* lii (1937), p. 51, fig. 20. For the example from Megalopolis see *HE.* i, p. 341, fig. 134.

³ This does not mean that the Hallstatt example is tanged; the shaft is inserted in the head itself, an arrangement made possible by the triangular section and leading directly to the prolongation of the head at the rear to form a shaft-socket. In many examples the three edges are also prolonged to form barbs.

⁴ *Iranians and Greeks in South Russia*, p. 41.

⁵ *S* 225 ff.

⁶ N 4-6. Strabo (96) identifies the *ἰπποπόδοι* with αἱ ἀνδρῶν Σκύθας καὶ Σαρδράν. The epithet *ἰπποπόδοι* is restricted in Homer to the Thracians and *ἰπποπόδοι* and apparently does not occur in later Greek. It suggests herds more widely ranging than those of *ἰπποπόροι ἄγροι*.

⁷ Rostovtzeff, *op. cit.*, p. 35.

by her interest in the opposite coast, and the establishment of the older Miltiades in the Chersonese was welcome to Peisistratos. There must have been comings and goings between this region and Athens in the course of which some Athenians would learn the look not only of Thracians, but of straying Scyths; and if this is not enough to account for the familiarity of certain black-figure artists with the Scythian bow,¹ we may hazard the guess that Athenian visitors to Miltiades sometimes brought back with them Scythian slaves or retainers.²

It was probably by Hecataeus that the shape of the Black Sea was first compared to that of a strung Scythian bow; the fullest account of this comparison is given by Strabo (125) in terms which exactly describe the Scythian bow of the black-figured vase-paintings.³ It will be noted that the bow is strung (*ἐπενεμένον*), not bent; the taut string is represented by the south coast from the Thracian Bosphorus to Dioscurias in Colchis, which is broken by no serious irregularity except Cape Carambis, so that it is approximately straight. The rest of the coast with its two unequal curves of which the western is the larger is compared to the bow itself. Just so the Scythian bow of vase-painting often has the upper curve much more pronounced than the lower, an unevenness which H. Balfour believed to be unintentional and 'due to the difficulty of building up the two limbs of a bow of composite structure so as to give them exactly equal strength and flexibility'.⁴

The often-quoted passage from Ammianus Marcellinus⁵ has received more attention than it deserves, for though he starts by stating that according to the universal opinion of geographers the Black Sea 'in speciem Scythici arcus nervo coagmentati formatur' (xxii. 8. 10), and though like Strabo he follows the coastline east to Colchis (24), he asserts that the two ends of the bow are to be found at the two Bospori, the Thracian and the Kimmerian (13). Clearly the curve of coast subtended by a line joining the two Bospori is not in the least like a strung Scythian bow. It does, however, bear a rude resemblance to a bent bow, which may be what Ammianus means by *arcus coagmentati*, and the wide, open curves from which the limbs are brought round into a crescent shape may be those formed by the still reflexed tips which when the bow is strung face away from the

¹ The black-figure artist's attention to detail is sometimes remarkable. Thus on the 'Tyrrhenian' amphora cited above, p. 285, the Scythian bow's necessary covering of bark or leather secured by thongs is plainly rendered on that of Artemis, and the lashings on as much of Apollo's as is visible.

² It has been suggested (P.-W. s.v. *Σκόθαι*) that the tyrants provided themselves with Scythian bodyguards. There is no evidence to support the hypothesis, but it would explain the vase-painter's correct observation of the Scythian bow.

³ Cf. Dionys. *Perieges.*, vv. 150-62, *Geog. Gr. Min.* ii, p. 111, ed. C. Müller.

⁴ *J.A.I.* ii, p. 308.

⁵ '... cum arcus omnium gentium flexis curvantur hastilibus, Scythici soli vel Parthici circumductis utrinque introrsum pandis et patulis cornibus effigiem lunae decrescentis ostendunt, medietatem recta et rotunda regula dividente' (xxii. 8. 37).

archer.¹ It is, however, unprofitable to pursue an inquiry into the possible meaning of Ammianus, who may not have had a very precise idea of the object which he attempts to describe; he certainly cannot have seen a Scythian or Parthian bow, though he might be expected to understand the Syrian and Persian forms. His account of the *regula* is unhelpful, but it is improbable that he meant a separate cylindrical piece of wood to which the limbs were attached, the interpretation forced on Bulanda by his identification of the Scythian with the primitive horn bow (*v. infra*). It may be confidently said that the wooden core of a composite bow is always continuous,² inasmuch as it forms a skeleton to support the horn and sinew. The *regula* is the Greek *πῆχυς*, i.e. the centre of the bow to which the utmost rigidity must be given and which must be straight for a space at least not less than the width of the archer's hand, in order to afford a good grip. It is therefore a distinct part of the bow and entitled to a name of its own. It will be noted that Strabo uses *κέρως* to denote the entire bow, not one limb of it,³ a usage likely to be fruitful of error when transferred to Latin epitomes of Greek authors, such as Ammianus doubtless used.⁴ Possibly, for all his interest in the long-range weapons of his own day, he was capable of this degree of misapprehension.

Since the bow of Pandarus is commonly supposed to have been formed of two horns of a wild goat placed base to base and joined by such a *regula*, it is best to discuss here an archaeological discovery which has been thought to support this opinion. In a private tomb of First Dynasty date in the Valley of the Kings at Thebes Flinders Petrie found a group of bows which he described as 'formed of two long straight horns of the oryx fastened together by a tapered plug of wood in the cores; doubtless binding round the horns secured them from splitting'.⁵ It will be noted that as the osseous core of a horn is rigid, the sole flexibility of such a bow resides in the handle, where it is best calculated to disturb the aim, and that its projectile power is very low. It is difficult to believe that even so far back as the fourth millennium such a bow had any but a religious or

¹ See, e.g., *JAL*, II, p. 304, fig. 13 B = Louvre 51 C (*CPA*, pl. 51).

² Balfour, whose experience was probably unrivalled, states that in every composite bow which he had examined the wooden core was continuous (*JAL*, xxiv, p. 56). In the Turkish bow (which he had not studied and expressly excluded from the statements made in this article) the wooden core is reduced to a mere lath, and is made of three pieces glued together; this is merely to avoid the difficulty of producing a long stave of sometimes no more than one-eighth of an inch in thickness; continuity is maintained (Sir R. Stanley-Gallway, *Projectile-throwing Engines of the Ancients*, Longmans, Green & Co., 1907, p. 5 of appended Treatise on the Turkish Bow).

³ Cf. Soph. fr. 859 (Pearson), where the Trojans are described as *ερεποντες*, and for poetical examples of *κέρως* = bow see *LSJ*,⁶ where, however, the example from Strabo does not appear.

⁴ It will be remembered that during the years immediately preceding the publication of his work in 350 or 351 he lived at Rome, where Strabo appears to have been very little read at any date.

⁵ *The Royal Tombs of the First Dynasty*, II, pl. vii 4, p. 26, and pl. vi, 35, p. 38, and cf. Bulanda, p. 7, fig. 2. For a fragment of a similar bow from Abydos, see Bonnet, *Die Waffen*, p. 140, and Wolf, *Bewaffnung*, pl. 16, 4.

symbolic use; nor is it found elsewhere.¹ Unfortunately Bulanda has identified with it not merely the bow of Pandaros (pp. 77-8) but the bows on the Geometric vases (p. 83) and one form of the Scythian bow (p. 53) for which he is obliged to postulate two, one consisting of two separate horns united by a wooden handle and resembling the Black Sea in shape, the other the letter sigma or a curly tress of hair.² As a necessary consequence of his identification Bulanda (pp. 80-1) assumes a distribution of the horn-bow over Egypt, Palestine, and Asia Minor, in which last the original centre of distribution is to be found, perhaps in Lykia.

THE BOW IN HOMER

Apart from the use of the bow by individual heroes, archery plays an insignificant part in the *Iliad*. The bow is a weapon of the λαοί and is used by both sides³ with so little effect that we must conclude the poet to have had only the European type in mind. It is significant that the adjectives ἀγυίλος, καμπύλος, παλίντονος, which are applied to the bows of heroes and are appropriate to the Asiatic bow, are never used in connexion with anonymous archery. The only apparent exception to the general rule is the effective use of the bow (without epithets) by the Locrians⁴ in a passage which is in several respects inconsistent with other data of the *Iliad* and may safely be regarded as an interpolation. It will be further discussed below (p. 301). Machaon is, however, described as good at cutting out arrows,⁵ which may perhaps indicate that, like the Mycenaeans of Ugarit, the Ionian Greeks had encountered a weapon more formidable than their own. The heroes, however, seem to have possessed bows, presumably for hunting and archery contests.⁶

Even apart from the supreme rôle of the returning hero's weapon, the tone of the *Odyssey* is somewhat more favourable to the bow. This is but natural when we consider the strong Cretan tinge of much of the poem; thus Odysseus in his character of Cretan soldier of fortune names the bow and throwing-spear as his favourite weapons, and in his own speaks as if archery had been of great importance in the siege of Troy and himself the best bowman there after Philoctetes.⁷ This is not the Odysseus of the *Iliad*.

¹ Bonnet's reference (p. 146) to *JAI* xix, p. 239, to prove the existence of such a bow in Java is based on a misapprehension. Plainly the bow in question, which in the unstrung state assumes a strong reflex curve, is made of the exceptionally thick keratin afforded by the horn of the water-buffalo.

² Agathon (Nauck, *TGF*?, p. 764, no. 4) compares this letter to the Scythian bow. Only the ordinary four-stroke sigma of the Ionian alphabet can be intended; the resemblance to a Scythian bow is good enough for a rough-and-ready comparison. Bulanda relies mainly on Ammianus and does not notice that the eastern tip of his bow is not in Colchia but in the Crimea. It is common ground that the earliest stringed instruments were developed from a series of string bows. Possibly the enigmatic objects from the Egyptian tomb represent a primitive, perhaps ritual, musical instrument.

³ *I* 79-80 (Greeks), *O* 313-14 (both sides), *Π* 361 (Trojans), 773 (both sides).

⁴ *N* 714-22.

⁵ *A* 514-15.

⁶ *B* 774-5.

⁷ *ε* 225, *θ* 216 ff.

Penelope, too, knows the fame of the Trojans in the use of the same arm.¹ The bows of the companions of Odysseus are described as *καμπύλα* on the one occasion on which an epithet is applied to bows collectively.²

None of the individual archers of the *Iliad* is a first-class hero, unless we grant Paris the courtesy title. Philoctetes in the Catalogue is plainly an intruder, and the fact that his followers as well as himself are *τόξων ἐδ εἰδότες ἰφὶ μάχεσθαι*³ may indicate knowledge or hearsay about the Assyrian use of archery to reduce besieged towns.

One hero alone in the *Iliad* fights as an archer only, the Lycian Pandaros from Zeleia, and he has to be made fit for heroic society by the explanation that from prudential motives he left his chariot at home.⁴ According to the Trojan Catalogue he had his bow from Apollo,⁵ but there is no mention of this in the body of the poem and it is obviously an afterthought. He himself declares it a failure and gets into the chariot of Aineias to fight with the spear; after a single unsuccessful cast at Diomedes he is killed by his enemy's return throw.

Homer's account of his bow (Δ 105 ff.) has a specious appearance of detailed precision which does not survive examination. Whereas the description of the boar's tusk helmet becomes clear in every detail once the object described is set beside it for comparison, that of the bow is at best vague and uninformative. If we accept (unnecessarily) the current translation of the poet's words, we saddle him with the absurdity of a bow made of solid horn and therefore devoid of all flexibility save what the handle might confer on it, a blunder of which he was surely incapable. The original of Pandaros' bow was composite, the principal constituents apart from horn being presumably wood and sinew. It seems perfectly possible to take line 110 as a summary account of a highly technical process which the poet had not seen, viz. detaching from the horns the sheath of keratin, cutting it into suitable strips, and gluing them into the groove prepared for them in the wooden core.⁶ *πάν ἐδ λείψας* now has an appropriate meaning, for the horn must fit the groove precisely, leaving no rough edges. This interpretation of course leaves us without any other guide to the size of the bow than the adjective *μέγα*, which would be justified by half the preposterous length of 8 feet proposed for the alleged solid horn bow. For a 3- to 4-foot bow it might conceivably be possible to get enough horn strips from a single goat.⁷ The passage contains several points worth

¹ ο 262. They are *μαχηταί*, not *ἀσχηταί* as in Δ 152.

² ε 156.

³ B 718-20.

⁴ E 102 ff. The Assyrian use of archers in chariots is unknown or ignored.

⁵ B 827.

⁶ It is remarkable that even Leaf accepted the solid horn interpretation of the passage, though in the second edition (*Iliad*, 2^d, App. x, pp. 584-5) he was able to refer to the case for the composite bow stated by v. Laschan ('Über den antiken Bogen', *Festschrift für Otto Benndorf*, pp. 189 ff.), who in turn had profited by the earlier of H. Balfour's articles. Evidently Leaf read v. Laschan's article inattentively, for he reverses the relative positions of the horn and sinew, assigning the former to the back and the latter to the belly.

⁷ Balfour, *JAI*, II, pp. 297 ff. Balfour regards the goat as apocryphal on the grounds that (a) no goat could provide horns of a length to equip a bow with a single keratin strip adequate

examination; we may take first the meaning of ἀγκλίνας. Of several explanations ancient and modern we may at once discard that offered by Schol. A and implicit in Schol. B: πρὸς τῇ γῇ ἐπερείσας ἑαυτόν, δηλονότι τοῦ μὴ ὀρθῆναι ὑπὸ τῶν Ἑλλήνων. An alternative offered by Scholl. A and T 'laying it' (sc. the bow) 'on the ground' has been accepted by some modern editors, but fails to take account of ἀγ-. The compound is rare in Homer and elsewhere in the poems is used only in the passive and generally of people who have sunk back in sleep, e.g. the Cyclops who ἀνακλινθεὶς πέσεν ὕπτιος.² This is inappropriate to a bow, which can only be laid on its side. Presumably if this were the meaning, the simple κλίνας would have been used, as in φ 137, adduced by Scholl. AT as a parallel; here, however, the bow is stood upright, leaning against a door.

A modern explanation, 'bending it by resting one end on the ground', has found some favour; this method was used for the English long-bow and, it would seem, for the Egyptian, which was also of great size, at any rate in some cases. It is exemplified in a painting in a tomb at Beni Hassan (Fig. 37) in which an Egyptian is represented as stringing his (reinforced) bow by resting one end on the ground and pressing on the belly near this end with his foot (Fig. 37, 1, p. 304), but we have no evidence that this method was ever used with any form of the composite bow.

Reichel³ was the first to see that ἀγκλίνας implies 'bending in the opposite direction', and can only refer to the stringing of a reflex bow; it goes closely with τανυσάμενος, 'when he had strung it by bending it backwards'. He also pointed out that ἀνέλκων is used with the same force in φ 128 and 150, corroborating (if corroboration is necessary) the composite structure of the bow of Odysseus. In E 97 Pandaros' bow is said to be καμπύλα and in Δ 124 it is said when at the limit of the draw to be κυκλοτερές, 'bent into a hoop', a strain which the European bow could not sustain without snapping. The expression is of course a poetic exaggeration, but it is fairly well exemplified on the Enkomi draught-box. No details of the bow's structure are forthcoming; presumably it was of the Anatolian type which Herodotus in his account of Xerxes' army repeatedly calls ἐπιχώριον without differentiation. We may surmise that it was a descendant of the bow on the Phaistos disk; in any case it was doubtless used by many of Ionia's neighbours. The poet would probably get his knowledge, such as it is, near home, and the name of the goat, ἱζαλος, points in this direction. Though it occurs only here as a 'five' word, Hippocrates⁴ uses ἱζαλή for a goat-skin, and Hesychius and Pollux (vii. 211, x. 57) respectively give ἱσοέλα

for each limb; (b) if several strips were glued together, they would almost certainly for greater security be lashed with dried sinew to the wooden core and its sinew backing, and that owing to the necessity of protecting sinew from damp, the entire bow would in that case have to be covered with bark, as are recent Persian bows of this type; consequently the poet would have no means of knowing that the bow contained any horn at all.

¹ The 'timeless' aorist is of course perfectly in order; cf. ε 320.

² ε 371.

³ *HW*², pp. 118-19.

⁴ *Περὶ ἁγμάτων* 29.

and ἰππέλα as meaning διφθέρα. Obviously there is an attempt to render an alien sound, which Bechtel identifies as Carian.¹ The bow of Odysseus was presumably of the same type. It is not Scythian, despite the Scythian γαυροτός, metal-cased (φαεινός),² with which it is incongruously equipped in *φ* 54, an inorganic line and an indubitable interpolation. Elsewhere it has only the quiver (*φ* 417, *χ* 2), which is proper to the European and the Asiatic (other than the Scythian) bow alike, and is carried at shoulder-height (*A* 45; cf. the archer from Sinjerli, von Luschan, *Festschrift für Otto Benndorf*, pl. x).³ The same is true of Pandaros; ἐσίδα τόξου (*A* 105) means 'detached the bow', which was carried strapped to the quiver, just as σῖλα πῶμα φαρέτρης (116) means 'took off the lid of the quiver'. We are not told how the bows of Pandaros and Odysseus were strung, but it cannot have been in the Scythian manner. There is only one way of stringing the Scythian bow,⁴ and it is abundantly illustrated on a series of Greek monuments: the bow is passed under the right knee with one end resting on the left thigh (or vice versa),⁵ while the archer bends the other end far enough back out of its reflex curve to allow of the loop of the string being slipped over the κορυφή. Telemachos and Antinoos when they attempt to string the bow of Odysseus both stand erect; Odysseus, who knows the knack of it, does not leave his seat, from which he also shoots his first arrow, that which passes through the axe-heads. We may note in passing that when he leaps on to the threshold he shakes out the arrows on the ground before him, which suggests that thereafter he shot either squatting or kneeling on one knee.

Pandaros' draw is only to the breast.⁶ Scholl. B and T point out that this is the Cretan draw (also that of the Greeks in general, as monumental evidence shows) whereas the Scythians draw to the shoulder. The bow is

¹ *Lexilogus zu Homer*, s.v. Hesychius also gives ἰππέλα, which he calls a Boeotian word, with the meaning διφθέρα. If the Ionized Carian word passed into the vocabulary of trade, it might well travel abroad. ἔσδα also denoted the dress of actors in satyric drama. Poll. iv. 118.

² The bow of the nomad required protection against the weather, and for the horseman it was convenient to have his stock of arrows at waist-level rather than shoulder-high behind his back.

³ Thus Artemis wears hers in the Theomachy (*Φ* 490-2); Hera wrenched from her shoulders the quiver with the bow attached to it, and the arrows naturally fell out. Owing to the fact that τόξα means equally 'bow' and 'arrows', they are described in *sat* as σαρπίδα.

⁴ Cf. Payne-Gallwey, *Projectile-throwing Engines of the Ancients*, Longmans, Green & Co., 1907, p. 9: 'Leg and manual power is the only possible method of stringing a strong reflex bow, unless mechanical power is utilized.' The writer of course has in mind the Turkish bow, the final triumph of the bowyer's art, a much more advanced product than even that of Odysseus can have been. Buland, however, reproduces an Assyrian relief on which a bow is represented as being strung by the joint efforts of two men, one of whom attends exclusively to the string, leaving both hands of his fellow as well as his knee for the bow itself, which evidently presented considerable difficulties.

⁵ i.e. according to the vase-painters, who give both versions; whether their representations are to be taken literally or not is another matter. Cf., however, Plato's remarks on the ambidexterity of the Scythians in archery (*Lysis*, 295 A).

⁶ Cf. *infra*, p. 297, n. 3.

called μέγα. How large a bow could be bent to the limit by a draw only to the breast it is difficult to say. In fig. 1 of Payne-Gallwey's monograph (p. 292, n. 4 *supra*) a Turkish bow is shown 3 ft. 9 in. in length as measured along the outer curve of the back from tip to tip and with a span of 3 ft. 2 in. between the ends when strung. On p. 19 the author is figured in the act of shooting with the same bow precisely as Homer describes: *νεύρην μὲν μαζῶ πέλασεν, τόξω δὲ σιδήρῳ*. Though drawn, however, to the full limit allowed by the length of the arrow, the bow is by no means *κυκλωτερές* in appearance nor does it look very large. If, however, we accept the discrepancy as covered by poetic licence, then it may be admitted that a bow of 3-3½ feet in length when strung, small as it looks in the illustration just quoted, would be μέγα in comparison with the huntsman's bow on the Cretan bronze relief. Whether the poet was right in ascribing the Cretan draw to the Anatolian bow is a point on which we have no evidence. The Idaean Hunt shield and the bronze relief from Knossos (Pls. VIII, 1 and XI, 1 and 3) show all the archers drawing to the shoulder, but the Oriental models by which they are dominated are probably not to be sought in Anatolia. All that can be said is that if Crete derived the composite bow from Anatolia, the draw would inevitably be the same to start with and change would hardly come about without a change of structure or at least of size.

The same scholiasts distinguish between the bow-strings of Scythian and Cretan as being respectively of horse- and ox-sinew. Bow-strings of various materials have been preserved in Egypt, some of them formed of conglomerations of sinew. To such a string the neuter plural *νεῦρα* would be suitable; even so we have *μηροί* (A 146) of the thighs of Menelaos, but *μηῖρα* (A 464)¹ of the slices from the thighs of sacrificial victims. The composite cord, however, has a unity which the sliced meat has not and is justifiably called *νευρήν* in the next line, where a spondee is required. *νεῦρον* again is the cord formed of a single sinew with which the shaft is lashed immediately behind the head of the arrow to prevent splitting (A 151).

The plural *γλυφίδες* admits of no such simple explanation. The term cannot apply to the nock of the arrow, i.e. to the groove at the end of the shaft into which the bow-string is fitted, for that is necessarily single: precautions were taken in antiquity to prevent its tendency to split the shaft, which would not wantonly have been increased by the addition of a second and wholly superfluous nock at right angles to the first, as has sometimes been suggested.² A much more probable explanation is that they were a pair of side-notches in the featherless sides of a flat-feathered

¹ Or, if any doubt the reading in A, v 26.

² Egyptian tombs have furnished a considerable number of arrows, including some of foreign origin; among these are arrows, presumably Assyrian, found along with the Pitt Rivers bow. None of either class has more than one nock. See Balfour, *JAI*, xxvi, pp. 215-17, for devices to prevent splitting. Hellenistic scholarship, however, seems to have decided

arrow, designed to afford a better grip to an archer holding the arrow between thumb and forefinger. This is a primitive and somewhat ineffective hold, but one identifiable not only on some Egyptian, but also on certain Assyrian monuments;¹ originally therefore it had a wide diffusion and was not confined to the self bow. The fact that it is represented on a series of Greek monuments² shows that it was remembered and presumably practised in Greece, where, as we have seen, there is every reason to believe that the self bow survived, long after it had been superseded in the Near East.

The only other example of *γλυφίδες* as a word current in ordinary speech is in the passage in which Herodotus describes how Artabazos and Timoxenos when negotiating the betrayal of Potidaia exchanged letters by arrow,³ a discussion of which will be found in a note at the end of this chapter.

That the head of Pandaros' arrow is of iron differentiates it from all others in the poems whose material is specified; they are described as *χαλκήρης* and *χαλκοβαρής*.⁴ Throughout LH III bronze was, as we have seen, the regular material, and so far as the scanty evidence at our disposal allows us to judge, continued to be so after the Geometric age, so far as mainland Greece was concerned. The 150 odd arrow-heads found in the Altis in the course of the first excavations at Olympia must have been in the main of bronze since they appear in the volume devoted to the bronzes;⁵ no exceptions are noted. Of the extra half-dozen found in the recent excavations some are said to be of iron.⁶ The use of *σίδηρος* here suggests that in Anatolia things were different; the neighbours of Ionia, who used their formidable weapon in serious warfare, regularly (it must be presumed) employed iron for their arrows,⁷ and the poet felt no scruple at alluding to the fact in the idiom of his own day, when iron had already long been the military metal *par excellence*. The breach with heroic tradition is not marked, since Pandaros is not a Greek nor even a Trojan, but a man with a non-Greek weapon and a disreputable character as well. The triangular arrow-heads of the Scyths are always, it may be noted, of bronze. Though not mentioned in connexion with Pandaros, this type occurs twice in the *Iliad*, in its barbed form, as the epithet *τριγλώχης*

in favour of 'hook' as the meaning of *γλυφίδες*, leaving the plural unexplained; see Ap. Rhod. iii. 282, and Hesych., Suidas, and *Et. Mag.* s.v.

¹ See Bouvet, *Die Waffen*, pp. 149 ff. and fig. 67 a, b, c, d. The finger-and-thumb draw is represented in 67 a (Egyptian) and c (Assyrian).

² See note at end of section.

³ viii. 128.

⁴ N 650, 662, α 262, O 465, δ 423.

⁵ *Ol. iv*, Textb., p. 177, pl. lxiv.

⁶ *Olympiabricht*, Jh. lii (1937), p. 51, fig. 20.

⁷ In the recent excavation by the British School of a site at Smyrna arrow-heads were found in some quantity and are mostly of bronze. Many of these however are triangular (i.e. Scythian), a form which has not so far occurred in iron. Until further particulars are available, the proportion of bronze heads of local origin cannot be determined.

shows. One is shot by Herakles,¹ perhaps already equipped with the Scythian bow which characterizes him in Greek art; it must, however, be remembered that from the Early Iron Age onwards the range of the Scythian arrow-head is much wider than that of the bow. Paris is responsible for the second.² Though the three-barbed arrow is not mentioned in the *Odyssey*, we may suspect of a Scythian origin the arrow-poison which, according to Athene's story, Odysseus went to fetch from his friend Ilos of Ephyre.³ Herodotus, it is true, does not include the use of poisoned arrows in his account of Scythian characteristics; it is established by later testimony.⁴

Of the structure of the other bows mentioned in the *Iliad* we get no hint; they are, however, linked to that of Pandaros by the epithet *καμπύλος* (*E* 97) which most of them share and which appears to be identical in meaning with *ἀγκύλος* applied to others. Since the bow of Pandaros is not Scythian, it follows that these epithets do not, or did not originally, describe the double curve of the sigma bow;⁵ they are amply justified by the recurved tips of any reflex bow when strung; *παλῦτονος* describes the reflex curve assumed by the typical composite bow in its unstrung state.⁶

Next to Pandaros the most conspicuous archer on the Trojan side (and longer-lived) is Paris, who makes his entry in this equipment,⁷ including the leopard-skin which did not need a hand to manage it as a shield would and could give some degree of protection against missiles. The short sword is a vital part of the archer's outfit, since he may be trapped at close quarters; it is regularly carried by Assyrian archers. Throwing-spears seem incompatible with the bow and do not appear with it in art, though Sophocles gives them to Herakles as well as bow and club.⁸ It may perhaps be argued that the special function of the archer operating by himself (as he does in Homer) was sniping from a concealed position, as Paris does in *A* (379), and that he would not wish to waste his arrows in defending himself against possible attacks while on his way to it. In preparation for the duel with Menelaos Paris presently discards his bow for full heroic equipment, which is detailed in the ensuing arming-scene. When recalled to battle by Hector, he goes out at the end of *Z* in full armour. On the following day, however, he fights as an archer (*A* 369, 505, 581) and ostensibly (since no change is recorded) is still in this trim when he heads one of

¹ *E* 393.

² *A* 307.

³ *a* 260-2.

⁴ Pseudo-Arist. *de Mirab. Ausc.*, 845 a; Pliny, *N.H.* xi. 279; Ovid, *Pont.* i. ii. 18; iv. vii. 11.

⁵ *ἀγκυλόροφος*, however, an epithet applied to the Paeonians in the Trojan Catalogue (*B* 848) and in *K* 428, may have this meaning; dwelling where they did, the Paeonians, if their archery was notable, probably used the Scythian bow. It may be noted that both the Trojan Catalogue and *K* are later than the body of the *Iliad*, and that elsewhere the Paeonians are called *δακρυχρῆες* and *ἰεροσκοποῦναι*.

⁶ See Balfour, *J.A.I.* ii, p. 301, figs. 9 and 10.

⁷ *I* 17-18, where he is called Alexandros, as in *Θ* 82, *A* 369, 505, and 581, in all of which he is an archer.

⁸ *Tr.* 321.

the five attacking parties in *M* (93); it is doubtful, however, if the poet so visualized him. He does indeed shoot an arrow in *N* 662, but he certainly makes a spear-cast in *O* 341-2. This suggests that Ebeling's statement¹ that when this double-named hero is called Paris he is always thought of as an archer is too clear-cut.

The case of the shadowy Helenos is different. His function, so far as he has one, is that of seer; as such he chiefly figures in later story. In the *Iliad* he makes only one appearance as a combatant, when, like Paris, he is told off to take joint command of one of the five assaults on the Greek wall (*M* 94) and thereafter (*N* 576) fights with a great Thracian sword. A few lines later (582) he bends against Menelaos a hitherto unmentioned bow, which seems incompatible with the use of a long sword; his arrow hits Menelaos full on the chest, but though launched within spear-cast range (vv. 581-2 and 594) rebounds from his corslet. As has been indicated above (p. 206), the passage 584-92 can only be an interpolation; it has probably displaced an earlier episode, for the wounding of Helenos is referred to in 781-3 without allusion to the bow.

Turning to the Greek side, we find that the appearances of Meriones as an archer are equally suspicious.² Throughout the early part of *N* he figures as a spearman, and the quality is emphasized, for when his weapon is broken, he returns to his tent to seek another and returns with it to the field (*N* 246-96); in 528 he is still fighting with it. No mention is anywhere made of a bow, but in 650-2 he lets fly an arrow at a retreating foe and wounds him fatally; of these lines 651-2 are adapted with slight verbal alterations from *E* 66-7, where he inflicts a similar wound by means of a spear-cast. In *II* 342-3 he fights as a spearman once more and we hear no more of his bow in the field. In the archery contest at the funeral games (*P* 859 ff., an episode which aroused the suspicion of even so determined a unitarian as Andrew Lang and in which Odysseus takes no part) he defeats Teukros, a victory which perhaps is a tribute to the acknowledged superiority of Cretan bowmanship, though the poet prefers to ascribe it to a momentary lapse in piety on the part of Teukros.³

Like that of Helenos, the bow of Meriones owes its presence in the *Iliad* to interpolation. Neither has any epithet. Only Dolon remains on the Trojan side. It may rank as one of the marks of lateness of the whole book in which he makes his brief and solitary appearance that Meriones lends his bow to Odysseus for the night expedition, a clear indication that Odysseus as the Bowman of the *Odyssey* was already known to the author. The incident is kept in mind, for Odysseus uses the bow in place of a whip when he has to control the horses of Rhesos (*K* 500). Though the bow is a strange

¹ *Lexicon Homericum*, s.v. 'Paris'.

² His few and mostly formal appearances in the earlier books of the *Iliad* have no importance in this connexion, except in *E* 59-65, where he uses the throwing-spear.

³ The contest must be the result of Ionian contact with Anatolia. Archery does not figure in any of the pan-Hellenic *ἀγῶνες*.

weapon to take on a night reconnaissance, Dolon is equipped with one slung on his shoulders, with a spear and a wolf hide (*K* 333-5). This is virtually a replica of the equipment of Alexandros; no doubt the author thought of it as typically Trojan. The bow is called *καμπύλα* (*K* 333) and *παλίστονα* (459).

The character of the bow of Teukros is indicated by the epithets *παλίστονον* (*Θ* 266, *O* 443) and *καμπύλα* (*M* 372). We first meet the owner at the beginning of *Z*, where he is fighting, at all events by implication, as a spearman. Reserving for the moment the episode in *Θ*, we find him again as a spearman in *M* when Menestheus sends out a desperate appeal for the aid of Aias and Teukros, the good archer (349-50). They comply, Pandion fetching the bow of Teukros who wounds Glaukos and, supporting Aias who fights independently with the spear throughout, helps with an arrow to drive off Sarpedon (400 ff.). In *N* 177 he is again a spearman, though there is an allusion to his archery in 313-14. Not till *O* 440 does Aias beg him to resume his bow and Teukros then takes his stand and begins shooting. Presently his string breaks and he once more resumes his spear. We hear no more of him until he is defeated in the singular archery contest of the funeral games. The episode in *Θ* stands apart. Only here do we find the un-Greek draw to the shoulder, called Scythian by an Alexandrian scholar,¹ but practised no less by the Assyrians, as numerous reliefs testify. The Greek posture in the eighth and seventh centuries varied, as our scanty monuments show, but the Assyrian archer stood erect, sheltered by his shield-bearer. Thus Teukros is sheltered, the only example in the epics of an archer so screened. *πάς ὥς ὑπὸ μητέρα* does not necessarily suggest crouching; it only reminds us that Aias is an exceptionally tall man, beside whom Teukros looks like a child.

Cyprus affords one humble monument, a rude terra-cotta group (Pl. XXII, 3),² which illustrates the practice; it consists of an archer, erect and drawing a small bow, and an attendant who screens him with his omphalos shield. In *H* (267), though nowhere else, Aias has an omphalos shield. Both men of the group have noses of a markedly Semitic type; both wear high peaked helmets, considerably higher, especially in the case of the shield-bearer, than the ordinary Assyrian pointed helmet. The archer has a quiver full of arrows slung over his back at shoulder-height, in the manner which is equally Greek and Assyrian. Unfortunately the execution of the piece is too crude to yield any information about the structure of the bow, but it can hardly be doubted that a composite bow is intended.³ It is too

¹ Neoteles, cited by Schol. A ad *Θ* 335. He is earlier than Didymus, possibly a pupil of Aristarchos, flourished therefore in a period in which the Scyth was still the typical archer of the Hellenistic world, which naturally knew nothing of Assyrian warfare.

² In the Metropolitan Museum, N.Y. The photograph from which the reproduction was made I owe to the courtesy of the Museum authorities.

³ On a Cypriot vase in the British Museum (Pl. XXV, 1) dated to c. 600 an archer in a chariot with the heavy 8-spoked Assyrian wheel draws an unmistakably European bow. This is no doubt true to fact; the Greeks of Cyprus were not at all likely to try to learn the use of the composite bow.

small to be drawn to the shoulder; the scale is roughly that of the bow on the relief from Sinjerli already quoted or that on the Attic Geometric vase in Copenhagen (Pl. XX, 1 and 2). There is no reason to date the terracotta earlier than the seventh century, to which this class of figurine is generally ascribed. In any case, whether the koroplast thought of his figures as Assyrians or not, this degree of familiarity with Assyrian tactics suggests a date later than the subjugation (possibly involving the occupation) of the island by Sargon II in 712.¹ This was followed by a revolt of the cities of the Philistine coast in conjunction with Moab, Edom, and Judah in an effort to throw off the Assyrian yoke; in Philistia the lead was taken by Ashdod, who had adopted as her king a Greek.² In these years many Cypriots and some Greeks of other communities would learn the look of Assyrian archers; there is, however, no reason to suppose that Ionians were likely to become acquainted with Assyrian archery before Sargon's advance to the Mediterranean coast. It is unlikely therefore that the Aias and Teukros episode in *Θ* can be the work of an eighth-century Ionian poet, all the more since it is inconsistent with the other passage in *M* where the brothers co-operate as spearman and bowman. Possibly it is to be classed with those indications of Cypriot influence which have often been remarked in *E*. The foreign name of this one combatant archer from mainland Greece and the fluctuating account of his birth (*Θ* 284, *O* 439) are worth remark; according to later story he was a half-breed. The mere fact, however, that his legend has already in the *Iliad* attained to a second stratum suggests that the first is of respectable antiquity; apart from the episode in *Θ* there is nothing in the account of him which can on archaeological grounds be denied to an eighth-century poet.

There can be no doubt that the bow of Odysseus is composite. The crucial passage is *φ* 393-5, where he tests the horn which it contains, aware that it is the part most likely to have been attacked by worm;³ further, the bow is called *παλῖτρονον* (*φ* 11) and *καμπύλα* (*φ* 359 and 362). Moreover, the business of stringing could hardly have been so formidable in the case of a 'self' bow of that date.⁴

In a single inorganic line (*φ* 54) the statement is made in quite unambiguous language that the bow of Odysseus was kept in a case. Since this is at variance with the repeated statement that there was a separate quiver

¹ For Sennacherib's invasion of Cilicia see King, 'Sennacherib and the Ionians', *JHS.* xxx (1910), pp. 327 ff., and for summary notes on Greek Geometric and archaic pottery found at Tarsus see *JA.* xxxix (1935), p. 517, figs. 41 and 42, and xlii (1936), pp. 44, figs. 33 and 34.

² Not necessarily a Greek of Cyprus as E. Meyer assumes, *C.A.A.* iii, pp. 42-3.

³ *JA.* ii, p. 304.

⁴ Odysseus' bow must have been of a sturdy and comparatively primitive kind to support the mauling which it underwent at the hands of the suitors and Telemachus. Payne-Guillwey (op. cit., pp. 9-10) notes that if in the effort to string a Turkish bow the limbs are given the slightest lateral twist as they are being bent, the horn parts are certain to splinter and the bow is then useless and beyond repair. The bow of Odysseus must have had a much stouter stave of wood than the modern Turkish.

(ϕ 11-12, 417, χ 2), the line must be regarded as intrusive. There is no reason whatever to doubt the correctness of the translation of $\gamma\omega\upsilon\rho\tau\acute{o}\varsigma$ as 'bow-case'; it has come down in the scholia of the *Odyssey*, as well as in Apollonius and Hesychius, who give no alternative meaning. Suidas and *Et. Mag.* give 'quiver', but the former adduces only a passage in Josephus (*Bell. Jud.*), and the latter makes the meaning depend on a fantastic etymology. Servius on Aen. x. 169 says that *coryti* are properly *arcuum thecae*, but that the term has been extended to the quiver. It must be remembered that the Scythian bow-case was divided into two compartments, the second of which held the arrows. The interpretation of $\gamma\omega\upsilon\rho\tau\acute{o}\varsigma$ as bow-case goes back to the days of Alexandrian scholarship, when the Scyths were still the most outstanding archers known to the Graeco-Roman world; as we have seen, it is always Scythian archery which is contrasted with Greek in the scholia. Even in Bekker's *Anecdota* (p. 1096) we find $\theta\eta\kappa\eta$ as well as $\phi\alpha\rho\epsilon\rho\alpha$ given as the meaning of $\gamma\omega\upsilon\rho\tau\acute{o}\varsigma$, together with a certainly erroneous ascription of the word to the Cretans. What meaning writers like Lucian and Quintus Smyrnaeus attached to the word is of no importance. There is a second indication of knowledge of the $\gamma\omega\upsilon\rho\tau\acute{o}\varsigma$ in a passage in the *Nekyia* generally regarded as late, that in which Herakles is described as $\gamma\upsilon\mu\mu\acute{o}\nu \tau\acute{o}\xi\omicron\nu \xi\chi\omega\nu$ (λ 607). Knowledge of Scythian archery is also indicated by the poisoned arrows already mentioned. Here there is no reason to think the passage later than its context; it is, however, significant that it occurs in the *Odyssey* and not the *Iliad*.

That the sole description by any Greek author of the stringing of the bow is confined to the one word $\alpha\rho\kappa\alpha\lambda\acute{\alpha}\nu\alpha\varsigma$ in the Pandaros passage shows that the Greeks had no practical knowledge of the weapon. If the poet of the *Odyssey* had understood the process, he could not have withheld his information in ϕ where our expectation is roused and disappointed. Ovid's brisk *Lunavitque genu sinuosum fortiter arcum*¹ is wide of the mark; combined leg and manual pressure (v. *supra*, p. 292, n. 4) brings 'Cupid's bow' into the sigma curve of the strung state (Pl. XXII, 4) and only drawing it to its full extent gives it the crescent curve. At the date when he wrote the line Ovid doubtless relied on inaccurate impressions of works of art; at Tomi where he saw corytus, bow, and poisoned arrows he might have done better.²

Some commentators have explained the effaced and indistinct rôle of the bow in Homer by the hypothesis that in earlier generations, typified by Herakles and Eurytos, the bow had been an important arm and that only vestiges of this stage are preserved in epic.³ All the archaeological evidence points in the opposite direction. From the remarkably extensive and well-furnished tomb series dating to the Late Bronze Age it is clear that the bow played a very small part in Mycenaean life and in warfare

¹ *Am.* i. 3. 23.

² *Trist.* v. 7. 15-17. ³ *Monro, Od.* xiii-xxiv, p. 395; van Leeuwen, *Iliad*, ad λ 295-16.

perhaps none at all. The scantier testimony of proto-Geometric and Geometric graves indicates that there was no change in the Early Iron Age; only on Late Geometric vases do we find archery playing a considerable part in war, with a slight but significant preference for bows of a foreign type. The evidence of the poems leads in the main to the same conclusions. The bow is sometimes frankly intrusive and is always foreign; the two archers who can make out a case for a reasonable antiquity (Paris and Teukros) are in whole or in part Asiatic. The Ionian Greeks first became interested in the bow when they learned to know it in their new settlements, but they did not adopt it, and apart from the ambiguous Teukros it is used on the Greek side only by the Cretan Meriones, in whose island it had always, or at least from very early days, been at home, and even by him (it would seem) only by interpolation. The only discrepancy between the Attic vase-painters and the Ionian poets is that the vase-painters, lacking the Anatolian background of the poets and having by some means become acquainted with the Scythian bow, show a certain preference for that form, which appears in epic only in the *Odyssey* and in the only explicit reference (that to the gorytos) by interpolation. The Ionians can hardly have been behind the Athenians in their knowledge of the Scythian weapon, guaranteed on the mainland by its appearance on Geometric vases of the last quarter of the eighth century.

The mention of the Near Eastern combination of bow and mace (*H* 140) has been noted above.¹

The appearance of the bow in the *Odyssey* as a vital element in the plot leads to far-reaching conclusions regarding the composition of that poem. The embryo of the *Iliad* must be sought in mainland Greece of the Late Bronze Age, but the very elements of the *Odyssey* must first have come into being in the Greek settlements on the Anatolian coast. None among them is likely to be earlier than the bow-fight in its original form, whose hero may not even have been Odysseus, but some traditional native hero of the bow whose tale was taken up by the Greeks. There is no lack of parallels for such a transference of themes from community to community and race to race.² How complete was the fusion of Greek and Anatolian elements in the tale is shown by the complementary rôles played in it by native bow and Greek megaron house.

An analogous mixture in its initial stages may be seen in the character of Apollo, champion of Troy in the *Iliad*, but also (it would seem) at one time the chief divine agent in the return of Odysseus,³ a position usurped in our *Odyssey* by Athene. The epithets ἀργυρότοξος and κλυτότοξος and his recognition as Lord of the Bow⁴ testify to the Anatolian element in him, however Hellenic the aspect which he ultimately came to wear.

¹ P. 119. Areithoos discarded bow and spear alike in favour of the mace.

² The tales of Brittany as transformed by the Court poets of medieval France are a case in point.

³ *v* 276-8 and *φ* 238 ff.; cf. *τ* 86. Cf. Seeck, *Die Quellen der Odyssee*, p. 19. ⁴ *Δ* 101, *O* 441.

I. THE LOCRIAN ARCHERS AND SLINGERS IN THE *ILIAD*

To the desultory and unregulated use of archers in the *Iliad* there is one exception, viz. the part played by the Locrian followers of the Lesser Aias when he and the Telamonian are withstanding the attack on the Greek camp.¹ The Locrians could not enter into the *σπαδίῃ δομῇ* because they had neither bronze-plated helmets nor shields (a contradiction of the description of the same forces in *Δ* 280 ff.), but only bows and *οἶδς ἄωρος*, whatever that may be. The meaning 'sling' was accepted in antiquity, if we may judge by the fact that Pausanias takes it for granted in a reference to this passage.² The word *σφενδόνη* occurs only once in Homer (*N* 600). The wounded Helenos requires a sling for his arm, and a squire produces *οἶδς ἄωρος* which is then explained to be a *σφενδόνη*, a sling (a meaning which must have preceded that of 'bandage') in a line which has very much the air of a gloss. In the Locrian passage the meaning 'bow-string' is rejected because wool is an unsuitable material for the purpose; but it may be doubted whether it is much better adapted to slings. Dried sinews (*νεῦρα*) were used by Xenophon's Rhodians when they had suddenly to take to slinging in the course of their march through Media,³ and they found plenty in the villages through which they passed. All that can be said is that the sling is the only ancient weapon which can be classed with the bow as outranging stone- and spear-throwing, and that *νεῦρα οἶδς* with that meaning would give a satisfactory sense in both passages. An interpolator wishing to introduce a rather trivial novelty into epic might do so in terms of dignified obscurity, trusting to the intelligence of the audience to take his meaning. It is tempting to take the Locrian passage thus, for we should then have a good pendant to the philippic of Archilochus against long-range fighters;⁴ in any case the bowmen by themselves are enough to illustrate the tendency he deplores. They are not the rabble of a chief's following; they are a corps with special technical skill, carrying out definite if rudimentary tactics by keeping up a protective barrage from behind the heavy-armed troops.⁵

Though there is no other reference in Greek literature to the Locrians as archers and though, as Pausanias says in the passage already referred to, archery is not native in Greece, it is hard to see how the description in *N* could have been composed if some Greek states were not at the time trying to develop that arm, and since the Locrians' conduct as described in that passage contrasts with everything that we are told elsewhere in Homer about the part played by archers, it is reasonable to conclude the lines to have been interpolated.

The introduction of the hoplite phalanx must have been followed or rather accompanied by some attempt to organize the *φίλοι* in however elementary a way; they must at least have been kept quite clear of the ground over which the hoplites operated and yet, obviously, so much man-power could not be wasted. No doubt the first half of the seventh century saw a good deal of experiment, and this seems a likely date for the Locrian interpolation.

¹ *N* 712 ff.² *Anab.* iii. 3. 17.³ i. 23. 4.⁴ Archil. B.⁴, D.⁵ The Locrian entry in the Catalogue (*B* 527 ff.) makes no allusion to archery; in *Sent.* 25 the Locrians are called *δυσχέραιον*.

II. Γλυφίδες

τοξείματος παρὰ τὰς γλυφίδας περιελίξαντες καὶ πτερώσαντες τὸ βυβλίον
ἐτόξευον ἐς συγκείμενον χαρτὸν. (Herod. viii. 128.)

If *παρὰ*, the manuscript reading, is kept, then *γλυφίδες* must mean 'side-notches', and the sense of the passage is that immediately below the notches the written strip was rolled round the shaft at the point where the feathers would normally come and that the feathering was somehow attached over it, perhaps by making slits in it over the feather-slots. When we turn, however, to the epitome of the story given by Aeneas Tacticus (*Poliorc.* xxxi. 26), we find that the preposition is *περὶ*, which reading, if correct, would imply that the *γλυφίδες* were the feather-slots and would remove all evidence for the existence of side-notches. Valckenaer thought that Aeneas preserved the original reading of Herodotus, whose text he emended accordingly; the emendation, however, has not been generally accepted, and Stein, *ad loc.*, keeping *παρὰ*, translates *γλυφίδες* as *Kerben*, i.e. 'side-notches', the only possible rendering. It may be noted that Aeneas adds a feature not found in Herodotus in the reason for the Persian archer's failure to reach his target . . . *διὰ πνεῦμα καὶ φαύλην πτέρωσιν*. This suggests that he either knew the story from two sources, Herodotus and another, or from a source later than Herodotus in which the two accounts had already been combined. If we consider factual probability, it is most unlikely that anything so delicate as the conduct of treasonable negotiations by archery would be confided to men who used the primitive finger-and-thumb hold, which, incidentally, was probably unknown to the Persians of the fifth century. This does not settle the question of the true reading in Herodotus, who presumably had the story, accurate or inaccurate, from a Greek, but supports the view that Aeneas gives the correct account.

III. THE HOLD

In Assyria the finger-and-thumb hold was supplemented as early as the reign of Assur-nasir-pal and probably soon altogether superseded by the 'Mediterranean' hold, which consists in grasping the string with the first three fingers, at the same time gripping the end of the arrow firmly between the first and second; the thumb and little finger do not come into play at all. Sometimes only the first and second fingers are used, but this is not an essential difference; in neither case is there any occasion for side-notches,¹ for the pull acts directly on the string, not, as with the thumb-and-finger hold, through the arrow, and the fingers cannot slip. That the new hold spread from Assyria to north Syria was established by v. Luschan when he published a relief from Sinjerli dating to c. 730² on which was represented an archer with a small composite bow; a second object which he carried suspended was convincingly interpreted by v. Luschan as a three-fingered archer's glove, not unlike its modern counterpart. His attempt, however, to identify a similar object in Greek vase-paintings must be pronounced a failure. The evidence is drawn solely from an object attached to the quiver of Herakles on a group of late black-figured Attic vases and is in fact a

¹ Bonnet, *op. cit.*, fig. 67 b and d.

² *Festschrift für Otto Benndorf*, pp. 189 ff. and pl. x.

fringed flap which served as a cover for the quiver and is constantly depicted in connexion with it. In the case of the two quivers which v. Luschan figures the fringe is replaced by three tabs, but there are other examples of tabs in various numbers replacing the fringe.

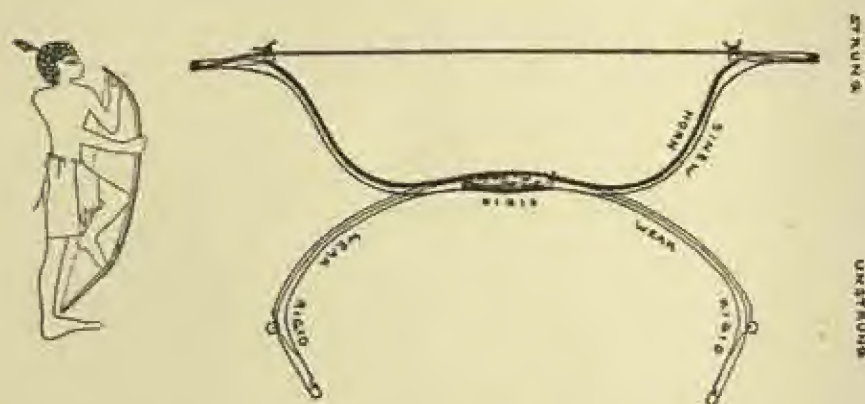
A few notes on the archer's hold as exhibited in Greek vase-painting may be added here. Of the Geometric examples nothing can be made, nor yet of the two proto-Corinthian representations of the European bow noted above (p. 283). The painter of the Herakles aryballos, however (p. 283, n. 4), makes a determined effort to represent the hold, but fails to make his meaning clear. The thumb and forefinger are distinctly rendered in the attitude of holding something; in fact they grip nothing and the string appears to pass behind the three remaining fingers. Our next example is furnished by the Paris of the Chalcidian vase (Pl. XXI, 2). Here we have an unmistakable rendering of the Mediterranean hold; it is appropriate to the barbarian and must in fact have been used, whether with two fingers or three, by the Scyths. 'Asiatic' would indeed be a more appropriate name than 'Mediterranean'; there is no doubt about the region in which it originated, and it is only the circumstance that the earliest representations of it occur in lands bordering on or in the neighbourhood of the Mediterranean that has produced the current rather misleading nomenclature. The execution of the Attic lekythos with the infant Apollo (p. 284) is so summary that it would be rash to interpret positively the intention of the artist; the draw-hand is a mere block, and all that can be said is that the thumb appears to be disengaged, which suggests the three-finger hold. On the other hand, on the 'Tyrrhenian' Niobid vase (p. 285), Apollo draws his beautifully rendered Scythian bow with finger and thumb; the hands of Artemis, whose bow is no less meticulously rendered, are unfortunately concealed. The Artemis of the Acropolis fragment (Pl. XXII, 2) very distinctly grasps her arrow between the first and second finger; the artist ('the Lydian') knew what he was about, for the feathering is situated some way down the shaft to leave room for the fingers. Yet the lion-skin which she wears after the fashion of Herakles is surely an Anatolian trait, even as her function as *ἄλυστρος*. The arrows of Herakles on the proto-Corinthian aryballos show the same feature in an exaggerated form, which may indicate that the artist sought to indicate side-notches and therefore the thumb-and-finger hold; he even appears to have made an attempt to represent the hold itself. We shall find that in fact this hold is regularly ascribed to Herakles by Attic vase-painters; an early unmistakable example occurs in a black-figured Gigantomachy on a vase in the British Museum.¹

In red-figured vase-painting of the 'fine' type we find a fairly definite tradition established, both as regards the bow, which is composite but of a new form, and in the draw. To take the bow first: we have a good example of it in the strung bow carried by Apollo on the Tityos cylix.² This differs from that on the Andocides vase (Pl. XXIII, 2) in that the curve is not uniform from tip to tip; the 'ears', i.e. the sections of the wooden core which lie between the ends of the horn strips and the recurved tips form a marked angle with the central section and have an appearance of rigidity. This is another well-known Asiatic type also figured by Balfour and reproduced here (fig. 37, 2) in a somewhat more pronounced form. The shortness of the arrows which Apollo grasps shows that the

¹ B 302, *Cat. Vas.* ii, p. 9, fig. 19.

² *Gr. Vm.*, pl. 55; *AluZ.* 502.

draw must have been short; to produce any effect at all the bow must have been highly elastic. The same features are present on the 'Panmeister' vase on which Artemis takes aim at Actaeon with a bow of this type;¹ the ears are less marked, for the draw has already begun, but the very small recurved tips are there and the small arrows. In the Gigantomachy on the vase known as the Melos amphora,² a late Attic production which epitomizes some major work of art, four bows are employed on the side of heaven. Artemis and Apollo carry, but do not draw, composite bows of the type just described. Herakles, whose support as son of a mortal mother was necessary for the success of the Olympians and (in the top right-hand corner) a female figure identified by Furtwängler with Hecate are in the act of drawing Scythian bows. The 'Apollo' bow, as we



1.

2. Tatar Composite Bow

FIG. 37

may call the 'eared' composite type, is used by both Apollo and Artemis on the famous Niobid krater of Orvieto.³ That the type was definitely associated with Apollo as the Scythian with Herakles is established by its appearance on an archaistic relief on a tripod stand in Dresden.⁴ The subject is the contest of the tripod; Apollo carries the bow of the Orvieto krater, Herakles the Scythian weapon which is his proper attribute.

Returning to the question of the draw, we find that the primitive finger-and-thumb hold is frequently used; inappropriate as it is, from the beginning of the red-figure tradition onwards. It is employed, very elegantly stylized, by Artemis on the Actaeon vase, and, more surprisingly, by Odysseus in the Slaying of the Suitors on the well-known scyphus,⁵ presumably to show that he is a Greek, and by Herakles and Hecate in the Gigantomachy to show that they are on the right side, though all three use the Scythian bow. Apollo, however, on the Orvieto krater holds the arrow between his first and second fingers. The elegant but ineffectual hold of Artemis on the Actaeon vase is possibly a tribute to her

¹ *Gr.Vm.*, pl. 115; *MuZ.* 475.

² *Gr.Vm.*, pl. 96, cf. *Textb.* ii, pp. 198-9; *MuZ.* 584.

³ *Mon.d.Inst.* xi, pl. xl; *Roscher*, iii, 1, p. 399, fig. 2.

⁴ *Roscher*, I 1, p. 455.

⁵ *Gr.Vm.* 138.2; *MuZ.* 539.

sex; on the Orvieto krater, where unfortunately she does not draw the bow, she carries her quiver Greek fashion, while Apollo's is slung at waist-level. There is not enough evidence to show whether there was any strictly observed practice in art; but in the case of the Scythian bow it may be that the barbaric character of the weapon was mitigated by the Greek quality of the hold.

9. THE BATTLE-AXE: ἀξίη OR πέλεκυς

The axe is mentioned only twice as a weapon in Homer—in *N* 611-12 and *O* 711. In the first case a Trojan, Peisandros, rushes on Menelaos, who is advancing on him with his sword. Each aims at his opponent's head. Peisandros strikes ineffectually the *φάλος* of his foe's helmet, which possibly in this case means the stilt of the crest;¹ Menelaos hits Peisandros just above the nose, fracturing his skull, whereupon his eyes drop out and fall to the ground—an extravagance not in the best epic manner.² The oddity of Peisandros' weapon, which he takes from under his shield,

ὁ δ' ὑπ' ἀσπίδος εἴδατο καλὴν
ἀξίην εὐχαλκον, ἐλαίνῳ ἀμφὶ πελέκκῳ
μακρῷ ἐβόεσσεν . . .

is noticed by Schol. B, who explains that the Trojans were carrying axes with which to break up the ships, but also used them for fighting, whether as a practice or in the actual emergency is not clear; Schol. T on the same passage seems to imply that the axe was at least a recognized weapon. One is inclined rather to suspect a contrast between the Greek with his gentleman's weapon and the Trojan with his barbaric and ineffectual tool. The impression is confirmed by the second passage, which runs as follows:

ἀξέει δὴ πέλεκυσσι καὶ ἀξίησι μάχοντο
καὶ ξίφεσιν μεγάλοισι καὶ ἔγχεσιν ἀμφίγυροι,
πολλὰ δὲ φάσγανα καλὰ μελάνδετα κυπήνεντι
ἄλλα μὲν ἐκ χειρῶν χαμάδις πέσον, ἄλλα δ' ἀπ' ὤμων
ἀνδρῶν μαρμαρέων βέε' δ' αἵματι γαῖα μέλαινα.

Here Schol. T remarks that the axes were carried not only for fighting but also for breaking up the ships, thus implying like B that they were confined to the Trojan side. The ancient commentators in general felt a difficulty in the passage. Line 712 was athetized by Aristarchus as superfluous; its defenders explained that the poet wished to enhance his effect by piling up the names of weapons. The curious statement in line 714 was explained to mean that swords fell from hands whose wrists were

¹ See *supra*, p. 240. Consistently, the helmet affords no protection to the face. Menelaos evidently delivers his blow with a slashing sword.

² It is repeated, however, in a different form (*O* 737-43) in the case of a similar fracture. The eyeballs might by the blows described be forced from the sockets; their falling to the ground is a sheer impossibility. See O. Körner, *Die ärztlichen Kenntnisse in Ilias und Odyssee* (1929), p. 80.

severed by swords and from shoulders when the whole limb was chopped off by an axe; but the line is awkward and obscure, and 713 contains the unique and unexplained epithet *μελάνδερα*. If we athetize the triplet 713-15 and regard 711 as describing the Trojan, 712 the Greek equipment, sense is restored. Failure to realize the distributive use of the copulative may well have led to the subsequent elaboration of the triplet.¹

It cannot be supposed that these two casual allusions to battle-axes, never a Greek weapon, are a relic of Bronze Age tradition, despite the fact that a large number of axes of stone and bronze have been found at various levels and in varying shapes on the site of Troy. Some of them were certainly made for ceremonial use and there is no evidence that any of them were weapons of war.

The sense of racial difference between Achaian and Trojan is just beginning to manifest itself in the *Iliad*, notably in the often-quoted opening of *Γ*; it must have developed into the opposition of Greek and barbarian in the years in which Ionia was establishing contact with her various neighbours. Archaeology has little to tell us of the axe in Anatolia, save as a cult symbol or divine attribute; if the battle-axe was used in the Early Iron Age in Anatolia, it had almost everywhere disappeared by the opening of the fifth century, to judge by the equipment of the Anatolian contingents in the army of Xerxes. In Xenophon's day it was well established between the Caspian and the Euxine and extended as far west as the country of the Mossynoikoi;² but this was the result of the Kimmerian and Scythian invasions, in the seventh century. The combination of bow and battle-axe was characteristic of both³ and we have seen reason to believe that Scythian archers were fighting in Greek armies before the end of the eighth century. This axe, however, seems to have been of the axe-adze type associated with the Amazons and in later Greek was known as *σάγυρις*.

Whether the *ἀξίνη* and the *πέλεκυς* stood for two different forms it is impossible to say. The former word is Indo-European, the latter exists in Assyrian and Sumerian and is well established in Homer, since it has given rise to the verb *πελέκεσθαι*. There is no reason to think it a neologism resulting from recently formed relations with the East; it may well go back to the Early Helladic immigration and can hardly have been acquired after the close of the Bronze Age. The lexicon provides a number of instances, mainly from Herodotus, of an individual being killed with a *πέλεκυς*, but none suggests that the instrument was a battle-axe. On the other hand, the historian, referring to the battle-axes of the Scythian tribe of Sakai, calls them *ἀξίνας σάγαυρις*. The Homeric passage therefore remains obscure.

¹ The distributive use of *καί* is unmistakable in *Scut.* 188-90 and probable in *O* 413-14. In this latter passage the effect of so taking it would be to limit archery to the Trojan side.

² *Anab.* IV. iv. 16; *V.* iv. 13.

³ See Rostovtzeff, *Iranians and Greeks in South Russia*, p. 41, pl. v, 1.

10. THE CHARIOT

The chariot is one of the few things in Greece which seem to have persisted without change in essentials from the sixteenth century to the classic age. It is true that for some centuries after the fall of Mycenae we have no direct evidence of its continued existence; but when it once more emerges to view in the Geometric art of the eighth century it retains two primitive features—the four-spoked wheel and the central position of the axle—which have entirely disappeared elsewhere, and a local peculiarity, the supporting rod or thong running from the upturned end of the pole to the front rail or the top of the breastwork. Apart from Mycenaean Cyprus this last feature is barely known if at all outside the Aegean area until it appears as a regular characteristic of the Assyrian heavy chariot in the ninth century (Pl. VI, 4*b*).¹ We are therefore justified in concluding that the Geometric chariot is the direct descendant of the Mycenaean and that it accompanied the colonists of Ionia when they crossed the Aegean; probably it had also gone with those Mycenaeans who in the Late Bronze Age founded settlements on the Anatolian coast.

That the chariot first reached Greece from Anatolia is fairly certain;² and so far as our evidence goes, the horse came with it. We find both represented for the first time in Greece on the stelai associated with the Shaft-graves and on one or two of the *objets d'art* which the latter contained. That the horse was known in Anatolia some centuries earlier is certain. It is true that the objects from Kultepe, which include horses' heads in terra-cotta and a seal with a representation of a horse-drawn chariot, cannot be used to establish this, since it is by no means certain that the finds are all of the same date,³ while that of Hammurabi, to whose reign the earliest are assigned, must be brought down considerably below that hitherto accepted, possibly even to the early sixteenth century. A few horse-bones, however, were found in Troy I (c. 3200–2600) and Troy II (c. 2600–2300), while in the recent excavations by the Americans Troy VI (c. 1900–1350) has been found to yield from its earliest beginning a quantity so exceptional as to suggest that the horse was then an article of food. Herds might of course be maintained for their meat and milk alone, but since the animal had undoubtedly been used for transport purposes by the Warrior folk who appeared in Europe before the opening of the Bronze

¹ For a typical example in a relief on stone see Layard, *Ninewah and its Remains*, ii, plate facing p. 350.

² The European origin of the war-chariot championed by Kossinna and his school cannot be maintained; see Grahame Clark, *Antiquity*, xv (1941), pp. 50 ff. A war-chariot generally regarded as ass-drawn was in use in Ur in the third millennium; J. Wiesner (*Fahren und Reiten in Alturopa und im Alten Orient*, 1939, p. 20) thinks that the animals are mules, but as the bones of slaughtered teams have been found in graves both at Ur and Kish, it must be presumed that they have been satisfactorily identified as the onager or wild ass which still survives in the region (*P. of M.* iv, pp. 810–11, figs. 763–90).

³ See E. Meyer, *Reich und Kultur der Hethiter*, pp. 51–5, figs. 44–5.

Age and had greatly contributed to their remarkable mobility, it is probable that the Trojan horses were also used as pack-horses if not for draught and highly likely that they were first brought in from Europe.

There is no need to trace here the earlier history of the domesticated horse, its first appearance in Europe, its diffusion and uses, themes which have been the subject of much controversy; but the following points, on which virtual certainty has been established, may be noted. Before the opening of the Bronze Age in mainland Europe the horse had accompanied thither the immigrant warrior cultures and as a means of transport had greatly promoted their mobility, though there is no evidence whatever that it served as anything but a pack-animal. It was already widespread when its appearance as a draught-beast is guaranteed in a region of special interest to us, that namely which extends from Töszeg in east Hungary to the Po valley and especially the west part of it. From about the west border of Hungary, it would seem, the future 'terramaricoli' entered Italy, bringing with them cremation, urnfield burial, and draught-horses, while the same movement of expansion brought cremation and urnfield interment to the north-east corner of Serbia.¹ It will be remembered that the same fashion of disposing of the dead has been found at Troy VI; it is true that by the hazard of survival our evidence applies only to the last phase of that city's existence, but guarantees it as far back as 1400 or near it, with nothing whatever to exclude a considerably earlier introduction. There is good reason therefore to think that Wiesner² is right in holding that the horses of Troy VI came from Europe, at the date at which we have found evidence for the entry of an immigrant host.

There is no evidence that they entered the Troad as draught-animals, for neither the bridle-bit nor the cheek-pieces which belong to it³ (either of which would guarantee the use of the horse for draught) have been found there; but the argument *ex absentia* must not be pressed. The invention, which first gave the control necessary for driving the horse and was therefore, as Hawkes points out, of supreme importance, was made in Europe at a date somewhat before 1500; how much earlier it is impossible to say, but the interval may be considerable. A cheek-piece of horn was found at Töszeg in east Hungary in the B culture, which is described as belonging to the centuries immediately before and after 1500, and in the contemporary *terremare* cheek-pieces of horn and bone were extremely common. Evidently the bit was made of a perishable material, presun-

¹ C. Hawkes, *The Prehistoric Foundations of Europe*, p. 343.

² *Fahren und Reiten*, p. 23.

³ There are none of these horn and bone objects in Greece, and, as Wiesner points out, there is a curious dearth of any remains of chariots or their adjuncts (*op. cit.*, pp. 24-6), a fact which suggests that they were not included in grave deposits. Mycenae has yielded one bronze bit (*Eph. Arch.*, 1891, p. 25; Reichel, *HW.*, p. 142, fig. 90) and a pair (unpublished) was found at Miletus in a Late Mycenaean grave which also contained a number of weapons.

ably wood, and there may well have been an introductory period in which this also supplied the cheek-pieces.¹

With the earliest appearance of the horse in the Near East we are not concerned. At a later date it is associated with the Kassites who ultimately overthrew Babylon and reigned there for an indeterminate period;² their language is not Indo-European, but the names of their leaders are. This conquest of Babylon was formerly believed to have taken place c. 1900, but as already noted the chronology of this period is under review and the date must be reduced. If, as is now suggested, the Kassite ascendancy was not established till the late seventeenth or even the early sixteenth century, it is not fanciful to regard that enterprise as one of a group of interrelated movements which included the development of the new arm in the Hittite and Egyptian empires³ and also the entry of the chariot and its masters into Greece. At all events, it was through the Kassites that that junction of the horse with the long-established ass-drawn Sumerian war-chariot was effected which revolutionized warfare in the Near East. That the new arm made its way rapidly in Anatolia we need not doubt; that it had reached Cappadocia in the reign of Hammurabi is at least a possibility. In this region an Indo-European aristocracy had early in the second millennium imposed itself on a native population, founded an empire with its centre at Boghazkeui, and introduced an Indo-European tongue as the official language. It is possible that the Shaft-grave dynasty and their followers were of this stock. Subsequent intermarriage with leading Helladic or Minoan families may have given the dynasty stability and produced the two racial types so strongly contrasted in the gold masks of the Shaft-graves;⁴ the fine bearded face may in that case claim to represent one of the invaders, since beards recur subsequently at Mycenae, but remain alien to Minoan Crete.

The stelai exhibit the lords of the chariot subduing foes, presumably inhabitants of Greece, who fight or flee on foot; possibly they commemorate the conquest of Mycenae itself. In any case the use of the chariot there both in war and in the chase is a salient feature of the new aristocratic society to whose rise the contents of the Shaft-graves bear witness. Unfortunately these earliest representations tell us little about the structure of the vehicle.

The following examples are available:

- 1, 2, and 3. Reliefs on stelai I (Fig. 3, p. 140), IV, and V (Pl. XXIV), on each of which the dead man is shown in his chariot, attacking or pursuing

¹ Hawkes, *op. cit.*, p. 341; cf. Peet, *Stone and Bronze Ages in Italy*, p. 353, pl. v, 8.

² *G.A.A.* i, ii, pp. 579 ff.; *CAH.* i, pp. 311 and 301; ii, p. 227.

³ The earliest representation of the chariot in Egypt comes from a tomb dating to the reign of Thutmose I in the third quarter of the sixteenth century (Davis, *Five Theban Tombs*, pl. 22); they first become common in the second half of the fifteenth.

⁴ *Schachtgr.*, pls. xlvii-lil.

a foe who is on foot or prostrate. There are also a few fragments from stelai VIII and IX, but they add nothing to our information.¹

The surface of all the stelai is weathered and that of I is badly defaced. The style, moreover, is summary and primitive; there is no indication of yoke, pole, or axle, and in order that the body of the car may be seen, the floor-level is placed at the top of the wheel (I) or above and clear of it (IV and V). It is roughly rectangular in profile and has very low sides, without the high breastwork of the Sumerian type.² The wheel is four-spoked and the position indicated for the axle is under the centre of the body. Neither the second wheel nor the second horse is indicated.³ On one of the fragments the second wheel is exhibited by being placed behind the first.

4. To the same period belongs a gold ring from Shaft-grave IV (Fig. 38) with an engraved design of a charioteer and archer driving in pursuit of a deer.⁴

Here the artist, though he indicates both horses, omits the reins, which are represented on the stelai, and also the yoke and harness; again the body is roughly rectangular in profile, though with a curved upper rim, the wheel is four-spoked, and the position of the axle central. The comparative roughness of the work suggests that mainland origin which is certain in the case of the stelai. Karo (l.c.) notes the shaggy and sturdy appearance of the horses, which agrees with that of the galloping animals on a rapier blade of exceptionally fine workmanship from Shaft-grave V,⁵ meant perhaps to represent a semi-wild royal herd running loose in the marshy pastures of *ἰννόβορον Ἄππος*.

5. The last example of this group,⁶ slightly later in date than the others, occurs on an engraved sardonyx from the tholos tomb at Vapheio (Fig. 39). The design consists of a chariot containing a warrior armed with a spear, and a charioteer, and drawn by a pair of horses of a more

¹ *BSA*, xxv, pls. xix-xxi and p. 134, fig. 30; *Schachtgr.*, pls. v-vii and p. 55, fig. 12. I, IV, and V were found over Shaft-grave V, which had three occupants, all men.

² See *P. of M.* iv, pp. 810-12, figs. 789-92.

³ The existence of a one-horse chariot both for this period and in the Geometric age has been maintained, but owing to the uncertainty in which we are regarding the intentions of the artist the evidence is unsatisfactory. Here the contemporary evidence of 4 *tyra* is against the hypothesis, while on that of the stelai we should have to postulate a one-wheel chariot as well.

⁴ *Schachtgr.*, pl. xxiv, no. 240, Textb., pp. 73-4; *JHS*, xlv (1925), p. 34, fig. 35 (enlarged). Karo's statement that there is no indication of the pole is an error, though it is less distinct in the reproduction in *Schachtgräber* than in others made from line-drawings. It is true that it does not make contact with the body of the chariot, but this is owing to the unnaturally elevated position of the latter, as on the stelai.

⁵ *Schachtgr.*, pl. lxxxvii, no. 748.

⁶ A fragment of the Siege vase as published by Reichel (*HW²*, p. 13, fig. 17 c) exhibits parts of a horse and chariot, but as the fragment has not since been recognized, it has either been lost or the design was misinterpreted. Evans inclines to the latter alternative (*P. of M.* iii, p. 89, n. 2). The completely level pole of the supposed chariot is an unaccountable feature.

refined breed than those of the rapier. Their legs are slender and all the shaginess has vanished.¹

Though the workmanship is still rude (the two human figures, for example, cannot be satisfactorily disentangled), the problem of the draughtsman is on the whole efficiently tackled. The horses have for the first time their full tale of legs, and a second head appears behind the first. The chariot



FIG. 38



FIG. 39

is of the same type as that on 4, with four-spoked wheel and central axle; the body occupies the same unnaturally elevated position. The side, filled with lattice-work which may represent either wicker or leather thongs plaited, is considerably higher; otherwise the profile is similar to that of 4. Pole, yoke, collar, girth, and reins are all distinctly rendered. The pole takes a strong upward curve at the point of its departure from the body, a feature characteristic of some of the earliest Sumerian chariots. It is strapped round and round from end to end, probably by the long ends of the *ζυγόδεσμον* which binds the yoke to it. Above it appears for the first time a device calculated to lighten the pressure on the yoke which thereafter remains characteristic of the Mycenaean and Minoan chariot. This consists in a supporting rod or thong which connects the upturned end of the pole with the top of the breastwork and is decorated with pennon-like flaps which generally touch the pole, sometimes descend well below it. This contrivance is unknown to Syrian and Egyptian chariots, which solve the problem, evidently urgent, by connecting the top of the breastwork with a point on the pole near its junction with the body by means of a thong or bunch of thongs or an attachment of wood or metal.² The pole of Syrian and Egyptian chariots takes a moderate upward curve immediately in front of the body and thereafter disappears behind the horse nearest the spectator.

A pole-end support (as we may call it for convenience) of this kind is represented on an engraved gem of the fifteenth century from Lyktos in

¹ *Eph. Arch.*, 1889, pl. x, 1; *HW.*², p. 139, fig. 88; *JHS.* xlv (1925), p. 35, fig. 36 (enlarged).

² *Nuoller, Der Reittwagen im Altertum*, pls. ii, 10 and 11; iii, 12 and 13; iv, 17 and 18.

Crète (Fig. 40),¹ and less completely but still unmistakably rendered on a sealing from Hagia Triadha² which dates to LM I δ and is therefore approximately contemporary with the Vapheio gem; it shows, however, a more

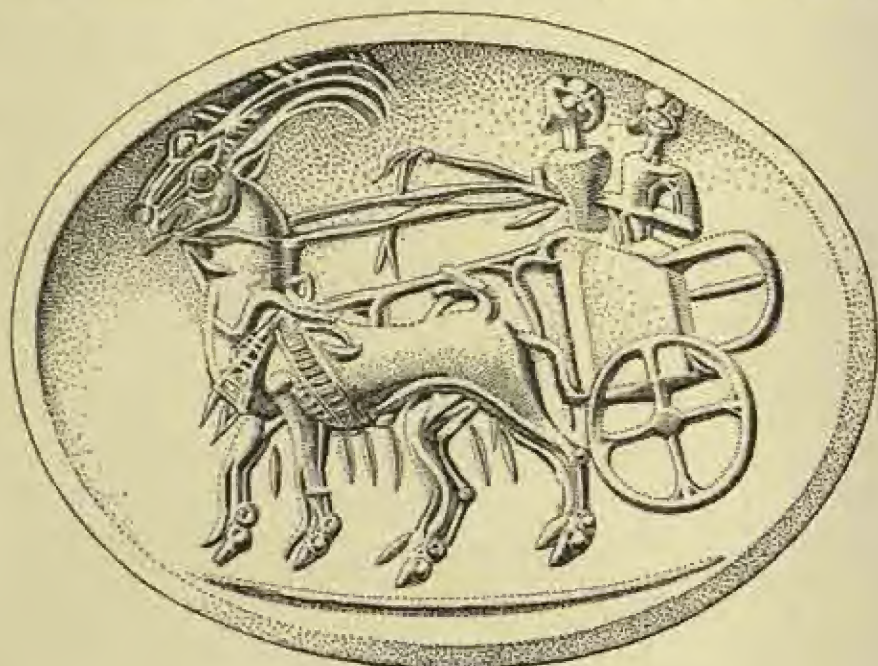


FIG. 40

advanced method of harnessing in that the collar is attached to the girth at the back. Yet a third Cretan representation of a chariot is to be found on a fifteenth-century gem from Knossos in the British Museum (Fig. 41).³ Here the pole is omitted—not unnaturally, for only a very short section of it could have been shown; but the pole-end support with its characteristic flaps is distinctly rendered. The yoke is also omitted, but the position of the collar, placed well below the pole-end support, shows the level at which the spectator is meant to supply it.

It is unfortunate that neither the stelai nor the gold ring throw any light on the pole and its support in the Shaft-grave period, and not less so that mainland evidence for the fifteenth century is lacking. We are therefore dependent on Crete for our knowledge of two forms of chariot body which appear in this period, one to become the standard Mycenaean and

¹ *P. of M.* iv, p. 823, fig. 805; *JHS.* xlv (1925), p. 36, fig. 37; both greatly enlarged.

² *P. of M.* iv, p. 828, fig. 808; also roughly reproduced from a plaster cast Bossert², 389 k.

³ *B.M. Catalogue of Gems*, pl. 1, no. 30; *P. of M.* iv, pp. 815-16, fig. 795. Evans explains the support as the pole itself, but this is never provided with flaps; nor does such a position for the pole seem structurally possible.

Minoan type, the other rarer in the Aegean area but more widely diffused. That on the Knossian gem is of the latter class; the body is no longer



FIG. 41

rectangular, but has a downward-curving side which in profile forms approximately a quadrant of a circle. This is the form of some Hittite



FIG. 42

chariots on the reliefs erected by Ramses II at Abu Simbel (Fig. 42),¹ and also of that on the better-preserved side of the Enkomi draught-box (Pl. XI, 1). It is believed to be also represented by an extremely crude

¹ Studniczka, *Der Ramswagen im syrischphönizischen Gebiet*, Jb. xxii (1907), p. 149, fig. 2; Naef, op. cit., pl. iv, 17; 18.

terra-cotta of LH III date from Mycenae.¹ There is perhaps some degree of affinity between this type and one of which an actual specimen survives, found many years ago by Rosellini in Egypt, but certainly not indigenous. It will be further discussed below.

The second class is represented by the wild-goat chariot of the Lyktos gem. Here the body is still rectangular, but from the side a curved projection extends far behind the floor of the chariot; the axle is central relatively to the floor if this is prolonged, as it seems to be, to the rim of the wheel, but somewhat behind the line of bisection of the rectangular side. This new form (called by Evans the 'dual chariot') is represented on

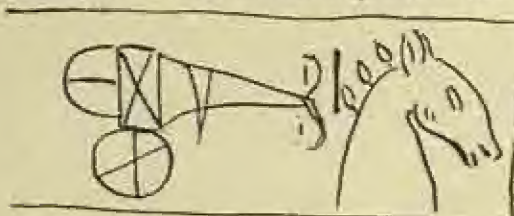


FIG. 43

a series of contemporary tablets from Knossos which apparently contain an inventory of horses and chariots (Fig. 43).² The pole and pole-end support with one, two, or three flaps are clearly indicated; the yoke is in

position, placed vertically so that it may be seen entire. The head of a horse with the mane dressed in tufts like that of the famous beast on the sealing from the Little Palace³ sometimes appears to the right. Wherever invented, the dual chariot is the standard form on the mainland in LH III. The example capable of the most complete reconstruction appears in the fresco of the Boar-hunt from Tiryns (Fig. 44).⁴ Here the axle is behind the centre of the floor and the pole has lost its upward curve immediately in front of the body, a change foreshadowed, perhaps achieved, in the chariots of the tablets, where the hasty drawing varies a good deal; it now runs from the bottom of the car in a straight, slanting line to the yoke.⁵ Enough of pole-end support and flap is preserved to guarantee the form, and there are fragments showing horses' manes dressed in tufts. Fragments of the megaron frieze at Mycenae⁶ survive in sufficient quantity to justify the reconstruction of two chariots as dual, with the axle behind the centre of the floor. Here also fragments with the tufted manes of horses occur. Finally, on the chariot sherd in the latest Mycenaean style from Tiryns

¹ von Mercklin, *Der Reinstoagen in Griechenland*, pl. i, 9; cf. a specimen in Professor A. B. Cook's collection reproduced in Wace, *Ch. A.*, pl. xxiv a, and cf. pp. 216-17.

² *P. of M.* iv, pp. 786 ff., figs. 763-4 and 766.

³ *Ibid.*, p. 827, fig. 805.

⁴ *Tiryns*, li, p. 98, fig. 40; for the reconstruction see pl. xii. The horizontal incisions on the horses' hooves are an Egyptian fashion; see Leleuvre des Noëttes, *L'Atelage, le Cheval de Selle*, p. 50.

⁵ The chariots of the Hagia Triadha sarcophagus are compressed, one indeed truncated by the frame (*Mon. Ant.* xix, pp. 55 ff.; Dussaud, *Civ. préhell.*, pp. 408-9, figs. 298-9; Bussert⁵, 253-4), but the horse-chariot is of the 'dual' class; on one at least the straight pole can be seen.

⁶ Rodenwaldt, *Fries*, Bell iv.

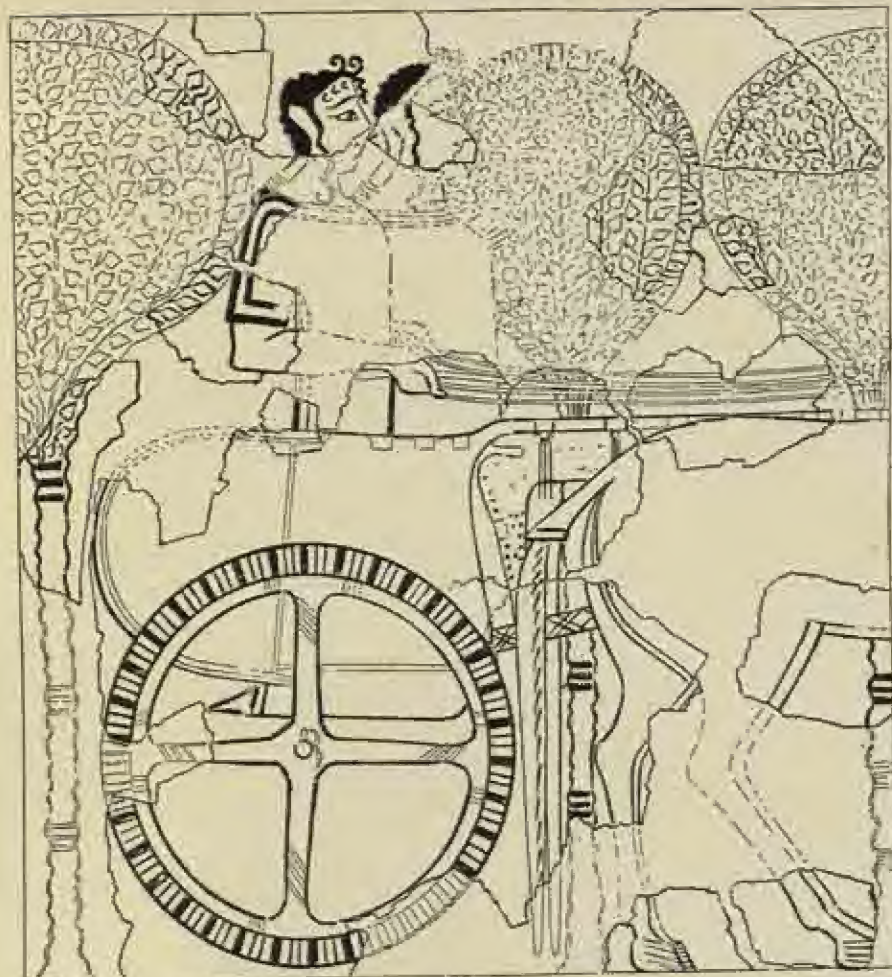


FIG. 44



FIG. 45

(Fig. 9 *supra*, p. 149) the greater part of a chariot horse with tufted mane is preserved as well as the pole-end support with flaps.

This strange form of chariot-body figures regularly on the Mycenaean vases of Cyprus (Fig. 45),¹ which suggests that it had a considerable vogue, though strictly within the Creto-Mycenaean world. It is difficult to conjecture the use of the peculiar extension of the side. If it were an open rail such as we often find on the chariots of archaic and classical Greek vases, it would afford a handhold to anyone mounting the chariot in motion, but it is solid, as the Tiryns fresco and Cypriot vases plainly show. Yet it affords no protection against an enemy in the rear, and must have been an obstacle to anyone running up at the side to seek safety in his chariot in the Homeric manner. von Mercklin suggests that the drawing follows an artistic convention and that the form represented is that of the chariot with 'quadrant' side already referred to as in use among the Hittites, the rectangular side representing the front (which he assumes to have been straight, not curved) and the extension the 'quadrant' side. This treatment of the problem in perspective would be not unlike that sometimes employed by Geometric vase-painters, but I have found no example in which the extension has the form of a quadrant.

In the latter part of the LH III period we have evidence, fragmentary but adequate, of the introduction of a type of chariot new in Greece but noted above as occurring in Egypt at some date in the fifteenth century, probably the latter half. On a sherd from Mycenae (Pl. II, 3) is depicted the rail of a chariot behind which stand two warriors each wearing a fringed kilt or chiton and carrying a round shield; the arm of the foremost is extended as though controlling the reins, the second holds an object which is probably a spear. As the chariot has neither breastwork nor side-panel, their figures are fully revealed. In front is the beginning of a pole and above it a bar parallel to it which it is impossible to interpret; it may possibly represent the tail of a galloping horse, but parallels are lacking. The bent knees of the warriors suggest that the chariot is in rapid motion and that they are trying to counteract the jolting. Neither here

¹ *Exc. in Cyp.*, pp. 37, 39, 49, 73, figs. 65, 67, 75, 126; cf. Bossert², 458, a sherd found at Ialysos. Sometimes (fig. 75) we have the pole-end support with flaps, sometimes it has been supplanted by a pole curving sharply upwards and attached to the top of the breastwork (fig. 126, Bossert, *loc. cit.*), but where it has disappeared, its memory seems generally to linger in a row of lozenges or circles with central dot placed between the reins and the backs of the horses. The 'quadrant' chariot on the Enkomi box has its pole fastened to the breastwork by a double attachment of wood or metal, running from the top of the breastwork to two points on the pole. The arm nearer to the body suggests comparison with the almost vertical supports, apparently of metal, which are characteristic of Assyrian chariots in the ninth and eighth centuries (cf. Nuoffer, *pl.* v, 23; *vii*, 40), on which they are combined with the pole-end support. The axle of this chariot is central and it has the Hittite six-spoked wheel. The chariot on the other side of the box has a rectangular body with a central or almost central axle, resembling another of the Hittite chariots on the reliefs of Alu Simbel (Nuoffer, *pl.* iv, 20). The type survives in this region; it figures, e.g., on fifth- and fourth-century coins of Sidon. See Studniczka, *op. cit.*, pp. 190-2. The figure in the text is reproduced from *Exc. in Cyp.*, fig. 65, no. 1076.

nor on either of two sherds from Tiryns¹ which give extremely fragmentary representations of this sort of chariot is there any indication of a support for the pole; in the case of the larger the omission is significant, for it is painted in exactly the style of the sherd already quoted (Fig. 9 *supra*) on which the support and flaps are elaborately rendered. Another curious difference may be noted. The horse of the pole-end support has its mane dressed in tufts, that of pl. xv wears instead the ostrich feathers characteristic of Egyptian teams and also of the horses on Cypro-Mycenaean vases, though in this latter case in conjunction with the dual chariot.

Of the curiously light and flimsy vehicle which we are now considering the Egyptian specimen cited above (p. 213) is a concrete example, being composed entirely of bent wood and leather and held together by pegs of bone; designed above all for lightness, it has not a scrap of metal in its composition (Pl. XXV, 1).² The woods of which it is constructed are exotic. Not all can be identified with certainty, but of the ash which forms the felloes of the wheels and the birch bark or bast which protects the junction of the spokes with felloe and nave there is no doubt. The southern limit of these trees is given by Schaefer³ as a line running from a point near Trebizond on the Black Sea to the south end of the Caspian, this sea forming the eastern limit, while a line running southward from Trebizond is the western. The body of the chariot consists simply of a wooden frame for the floor, which is made of interlaced thongs of leather, and of a single rail with one central support and no other form of breastwork. Nuofer indeed supposes that there was originally a breastwork, possibly of leather thongs, but it is difficult to see why the breastwork should have perished when the floor survived.⁴ The wheel is four-spoked, the pole is supported in the Egyptian manner near the junction with the body by a pair of thongs, and the axle is at the rear edge of the floor. It has sometimes been thought

¹ Schliemann, *Tiryns*, pl. xv and p. 354, fig. 155. These late sherds with human figures bear an unmistakable relation to the frescoes of the mainland, both in their themes and in certain details, such as the tufted manes. We have two examples of the groom with horse (Rodenwaldt, *Fries*, p. 24, fig. 14; F. and L., pl. xxxviii, no. 395); the upper part of a woman's figure (F. and L., pl. xli, no. 426) recalls the ladies walking in a religious procession who seem to have been a stock theme of fresco (Thebes, Tiryns). Despite the barbarism which fills the bodies of the horses with meaningless basket-work, the style, of which the Warrior vase is the best and one of the earliest examples, has a vigorous if uncouth life and movement, as well as introducing new themes and details presumably due to developments in fresco. The advancing lines of warriors on the vase have no prototype in Minoan or Mycenaean art; they are nearer to the hoplite ranks of the Chigi-oinochos, and behind both lies the decorative frieze of the East. Of the new details some—the fringed garment and both types of helmet—point to Anatolia, the chariot possibly and the ostrich feather certainly to Egypt.

² Rosellini, *Mon. del' Egitto*, li. 122; Studniczka, *op. cit.*, p. 147; Nuofer, *op. cit.*, pl. i, 1; Lefebvre des Noëttes, *op. cit.*, fig. 42. The object which stands upright in the chariot is a bow stated to be made of an Egyptian wood, *καλόνπος ἢ Αἰγύπτιος*.

³ H. Schaefer, 'Armenisches Holz in ägyptischen Wagnereien', *Sitzungsb. der preuss. Ak. der Wissenschaften*, 1937, pp. 730 ff.; cf. Dittmann, *Germania*, xviii (1934), pp. 249 ff.

⁴ The point, however, cannot be pressed, for this chariot was found in Rosellini's absence by his Arab diggers working under the supervision of his personal servant. Rosellini states that it was nearly complete.

that this specimen is too light to have served a practical purpose, but on the other hand it is alleged to show traces of use, and the position of the axle with the weight in front instead of over it would have a steadying effect.¹

The LH III sherds show no trace of pole support, whether of the Egyptian or the Mycenaean type; unfortunately the position of the axle cannot be determined on any one of them. This light, single-rail chariot seems to have been permanently adopted in Greece, for it appears, unchanged in essentials, as one of the types depicted on Dipylon vases and also in the form of bronze votives at Olympia. Among these latter two slightly differing types are found.² Both have the axle at the back and a rail with a single central support and no breastwork, and neither has any



FIG. 46

separate support for the pole. In the first case, however, the support of the rail is not vertical, but runs obliquely to the pole, thus performing a double function (Fig. 46). While we must accept simplification in these rude models, it seems probable that in this case the form is a real one, for some

Etruscan chariots show this slanting profile of what is no longer the mere

¹ It is a moot point whether Rosellini's chariot was made in Egypt of imported woods or imported ready-made. In favour of the latter hypothesis it is urged that if the lashings of the wheels are, as Rosellini thought, of birch bark, this material would have dried and stiffened long before it could reach Egypt; if, however, it is bast, i.e. the inner fibres separated from the outer rind, as Schuchhardt (*FZ*, iv (1912), p. 447) and Schäfer hold, this probably would not happen. On the other hand, chariots certainly were made in Egypt of foreign woods at about this date. An inscription which accompanies one of two badly defaced paintings of chariots from the tomb of Kenamun (*c.* 1435) states that it was made of woods brought from 'the mountain land of Nuharin', i.e. the kingdom of Mitanni, which included land on both sides of the Euphrates and probably extended into south Armenia (E. Meyer, *G.d.A.* ii. 1, p. 101; Bilabel, *Geschichte Vorderasiens und Ägyptens*, pp. 6-7). This does not indeed bring us to the southern limit of ash and birch *c.* 40° N., but if Mitanni did not possess, she was at least in contact with the region and was able to procure what woods she wanted. As she carried on a lively trade with Egypt as well as paying her tribute, no doubt supplies of raw material for chariots reached Egypt in fair quantities. On the other hand, Mitanni is recorded before the end of the fifteenth century as sending ten wooden chariots as a present to the Pharaoh (Knudtzon, *Die el-Amarna Tafeln*, xl). Mitanni remains unexcavated, and in consequence we are all but completely ignorant of her material civilization. Some half-dozen seals, however, ascribed to Mitanni and dated to *c.* 1500 have representations of the chariot; there is no example of the Rosellini type, all but one having the roughly rectangular box-body and the other the 'quadrant' side (Moortgat, *OLZ.*, 1930, pp. 24; ff.). In Egypt this light chariot continues in use practically unmodified except for the adoption of the six-spoked wheel. Amenophis III appears driving one (Petrie, *Six Temples*, pl. 10; Nuoffer, pl. i, 4). So far as our evidence goes, it is found only in Egypt and Greece, though the Retenu, tributaries of Egypt under the XVIIIth Dynasty, have one very like it (Nuoffer, pl. iii, 14; cf. p. 26).

² *OL* iv, pl. xv, no. 253 = von Mercklin, pl. ii, no. 38 = Fig. 46 *supra*; *OL*, *l.c.*, no. 249 = Lamb, *Gr. and R. Bronzes*, pl. xvi a.

support of a rail, but a solid breastwork, giving the body of the car rather the appearance of the toe of a shoe.¹ Nachod says that the position of the axle is behind the centre,² but this is not the case if we do not reckon the part of the floor which underlies the sloping projection; moreover, the charioteer occupies the place which he does when the axle is central, viz. directly over it. This Etruscan chariot therefore is akin to a somewhat more elaborate bronze model from Olympia which has the vertical upright joined to the pole near the body by an oblique support, and the axle in the central position.³ On the other Olympian bronzes the axle is at or near the rear edge of the car, but on Attic Geometric vases and Boeotian fibulae⁴ it is regularly central. This is evidently the native Greek fashion surviving from Mycenaean times, and it is natural that it should appear on the funerary vases of the Dipylon and on fibulae from the tombs of Thebes which represent local usage, whereas the votives of Olympia were dedicated by victors from all quarters of the Greek world.⁵

A miniature bronze wheel with six spokes was found at Olympia,⁶ ivory wheels with seven and eight at Ephesus;⁷ the six-spoked wheel appears on a Geometric vase from Kavousi in Crete⁸ and on the Melian amphora with Apollo and Artemis,⁹ the eight-spoked on a Dipylon vase in the Metropolitan Museum of New York,¹⁰ on the Phineus vase, on Clazomenian sarcophagi, and on a Clazomenian sherd which also shows the axle at the extreme rear edge of the floor. These Oriental features never established themselves on the mainland of Greece; the Dipylon vase with the unique eight-spoked wheel belongs to the end of the period when the war-chariot was on the point of final disappearance, and merely records an Oriental model which the artist had encountered.

The experiments of the Dipylon artists in perspective introduce an element of uncertainty into some of their representations of chariots, but

¹ Nachod, *Der Rennwagen bei den Italikern u. ihren Nachbarn*, pl. iii, no. 74; *JHS.* xiv, pls. vii and viii.

² Nachod, *op. cit.*, p. 60.

³ *Ol.* iv, pl. xv, no. 250.

⁴ Hampe, pls. iii, iv, and xii, 12. All the examples have the pole-end support, tilted together with the pole at an extravagant angle and released from any possible connexion with the yoke, which is not indicated. Hampe dates the fibulae to the third quarter of the eighth century, but they probably belong to the seventh.

⁵ Since the chariot-race was not introduced at Olympia till the 25th Olympiad, the chariot votives, despite their primitive appearance, cannot well be earlier. They are doubtless the product of local industry, but the victor would no doubt insist on a correct rendering of his chariot, which was there to serve as a model. The tall pointed caps of the charioteers suggest an Anatolian origin.

⁶ *Ol.* iv, pl. xxv, no. 308.

⁷ Hogarth, *Exc. at Ephesus*, pp. 168-9, pl. xxvii.

⁸ *A.J.A.* v (1901), pl. iii.

⁹ Courte, *Melische Tongefässe*, pl. iv; *Muz.* iii, no. 108. The form of the body is modified to contain three occupants, another Oriental trait. The true Greek chariot carries two only; Mytilus (an Anatolian) did not live to finish the journey on which he started as an inappropriate third.

¹⁰ *A.J.A.* xix (1915), pp. 325 ff., pls. xxi-xxiii.

there are examples in pure profile where no mistake is possible. One such is reproduced on Pl. XXV, 3;¹ it has a practically vertical rail-support with a slight convex curve and a breastwork of wicker or leather thongs. The axle is a little in front of the floor-centre and the pole has the pole-end support; but the general resemblance to Rosellini's chariot from Egyptian Thebes is striking. A bronze chariot model found in the Tiber (Pl. XXV, 4)² has an eight-spoked wheel and a position for the axle a little behind the centre, but it is unmistakably of this type and probably testifies to Greek influence in Italy at a time when the form was still current, i.e. in the eighth century, since there is no evidence that it survived any longer in Greece. Nachod classes it as 'Egypto-Geometric', which is convenient as a designation, nor is direct contact between Greece and Egypt by any means impossible at that date, even if as yet unproved; but whereas, as we have seen, the form survived from Mycenaean days in Greece, there is no evidence that in Egypt it outlived the Bronze Age.³

To return to the Dipylon vases: more commonly the chariot has two rails without breastwork and of croquet-hoop form which are shown one behind, the other in front of the occupant or occupants of the car (Pl. XXVI, 1, 2, 3).⁴ In these cases it seems certain that the rail at the back represents one of the sides; Reichel's reconstruction⁵ with it at the back, where it would offer a formidable obstacle to getting in and out in a hurry, has found no acceptance. Frequently the lower half of the space below the front rail is filled in with paint, which indicates a low solid screen surmounted by a rail.⁶ The sides are lower than the breastwork; sometimes they have above them a rail which is prolonged behind the floor to form a hand-grip; sometimes there is no rail above the solid part, but a hand-grip, often of exaggerated length, behind.⁷ The wheel is four-spoked and, if not always mathematically central, is directly under the feet of the charioteer. This is in essentials the form which persists in vase-painting; except in the pole-support, there is practically no difference between this form of Dipylon chariot, that on the Chigi vase,⁸ and that on a vase of Meidias portraying the rape of the Leukippids.⁹ In the earlier period the attachment of pole and body varies a good deal. The pole-end support occurs on the three Boeotian fibulae, and on Dipylon vases is frequent enough to suggest that in Attica

¹ After Reichel, *HW* 2, p. 125, fig. 67.

² *B.M. Cat. of Bronzes*, no. 2095; Nachod, pl. iv, no. 149; cf. pl. iii, 48 and 67.

³ Fortwangler's only reason for describing the Olympian models as of Egyptian type was their general resemblance to Rosellini's chariot.

⁴ von Mercklin, pl. iv, 60; *HW* 2, p. 124, fig. 64; Hampe 6, 88, fig. 31.

⁵ *HW* 2, i.e., fig. 65. It is interesting to observe how in the painting reproduced in Pl. XXVI, 3 the rear hoop of the chariot which the Mallans seek to re-enter has been virtually suppressed to facilitate the operation.

⁶ A fragmentary Geometric terra-cotta from the Athenian Agora shows a man in a short striped tunic standing in a solid chariot-body whose side comes well above his knee. *Hesperia*, Supp. 5, p. 66, fig. 42.

⁷ von Mercklin, pl. ii, 78.

⁸ *Gr. Vm.*, pl. 8; *MuZ*, iii, 593.

⁹ *Ant. Denk.* ii, pls. 44-5.

it was at least regular,¹ while the Olympia models show that in some localities, perhaps in Asia Minor, an oblique support running from the top-rail to an intermediate point on the pole took its place. On a very late Dipylon vase (c. 700) in the British Museum the pole-end support (which in memory of the Mycenaean flaps carries three small tags)² is supplemented by a second running almost horizontally from the top of the solid breastwork to a point which must lie about the middle of the pole. This probably represents a real change in structure, for it is found on a number of later examples, notably the Chigi, Amphiaras, Phineus, and François vases. Its portrayal was a matter of some difficulty for the artist and the data cannot be interpreted with certainty. It looks as though a thong were attached to each side of the chariot on the inside at the level of the top of the solid screen; they were carried forward each through a hole in the side, joined a little way in front of the body, and then tied to the pole at a point which is naturally always concealed by the horse nearest to the spectator.

After the Geometric age the chariot is no longer employed in war,³ and evidence fails for its other regular function, that of driving in procession at the funeral of a great man. This solemnity was regularly depicted on the earliest Geometric pottery with figure decoration, viz. the large kraters and amphorae which served as grave monuments and which find no place in the ceramic art of the succeeding age. Solon's funerary legislation may have put an end to it if it had not already disappeared.

In spite of the relatively considerable number of monuments which record the chariot, we know nothing of the use which the Greeks of the Bronze Age made of it in war. Concerning the two great protagonists of the eastern Mediterranean—Egypt and the Hittite empire—we are better informed. The chariots of the kings of Megiddo and Kadesh might well have inflicted serious damage, if nothing worse, on the army of Thutmose III in the battle of Megiddo in 1479; as matters turned out, the Pharaoh was able to record with special satisfaction the capture of 924 of them and over 2,200 horses. At Kadesh in 1288 the Hittite chariotry very nearly

¹ It is sometimes difficult in the case of Dipylon vases to know whether an omission is significant or merely an arbitrary simplification. The yoke is never indicated. In an example figured by Reichel (*HW.*, p. 124, fig. 64) there is no pole-end support shown, but since, though two horses are plainly shown, they have only one pair of reins shared between them, there is no certainty that the pole-end support was absent in reality.

² These tags in groups of three appear on the pole-end support of the chariot of the Tiryns fresco, where they seem to be the ends of cords by which the flaps are attached to it. They reappear, always in groups of three, on various Dipylon and proto-Attic vases.

³ Sappho still knows of the war-chariot, but only as Lydian (Diehl 27 a, l. 19; Lobel 5. 19) and perhaps only as a romantic appendage of bygone warfare, since Alyattes collected horses in order to convert his own hoplites into cavalry (Polyaen. *Strat.* vii. 2. 2). The simile in Theogn. 986-7 can only be an epic ornament. There is a fifth-century Boeotian terra-cotta model of a chariot containing a warrior and charioteer, the former armed as a hoplite, the latter with a 'Boeotian' shield slung over his back. It can have nothing to do with contemporary warfare; possibly it records some ceremonial procession or contest (*Eph. Arch.*, 1896, pl. iii).

turned the tide of battle against the Egyptians. In 1221 Merneptah used his to complete the rout of the Libyans and their Achaian and other allies and drive them from the Delta. The Egyptians in fact used their chariots carrying archers firstly as shock troops for attack, followed up by massed infantry, and secondly, like cavalry, for pursuit. Their attack could be withstood only by the enemy's chariotry, which, unless it carried weapons of equal range, was doomed, *ceteris paribus*, to defeat. Thus in the reliefs at Abu Simbel which commemorate the battle of Kadesh we see the Hittite chariots carrying spearmen charging the Egyptian line but succumbing to the arrows of their foes.¹

Whether any such organized use was made of the war-chariot in Bronze Age Greece we cannot tell. That it played an important part in the establishment of the Shaft-grave dynasty at Mycenae is perhaps a legitimate conclusion from the evidence of the stelai; probably it helped to build up the supremacy which Mycenae acquired over the Peloponnese. In LH III it was certainly of importance in maintaining her central control, rather perhaps as a means of communication than as an instrument of war. This is guaranteed by the network of made roads with bridges of which Mycenae is the centre and by the wheel-ruts deeply scored in the stones which pave the Lion gateway, though the roads may have carried principally the wagons of commerce. The ability, however, to meet promptly in the plain any invader, whether he landed at Nauplia or came down one of the passes from the Corinthian Gulf, must have been of the first importance in the eyes of the feverish fortifiers of Mycenae and Tiryns.

How far the development of the Mycenaean chariot was influenced by Egypt there is not sufficient material to tell us. The incised hooves of the horses in the Tiryns fresco, and the ostrich-plumes of the sherd show unmistakable, if trivial, Egyptian contacts; more important is the possible derivation thence of the Rosellini type of chariot. It is true that our earliest evidence for it (the sherd from Mycenae) can hardly be earlier than c. 1250, when Greco-Egyptian relations had almost ceased to exist, but that is also the earliest date at which the evidence of figure-painting on vases becomes available; the chariot may have been there considerably earlier. The Mycenaean at Gurob must have been familiar with Egyptian chariotry, especially if, as has often been suggested, they were a colony of mercenaries. It is at least equally probable, however, that the light chariot came more directly from Mitanni to Greece via Ugarit.

There is another quarter from which influence may well be suspected. Assuming the identification of the Ahhijawa of Hittite records with the Achaians to be correct, we have evidence that their *haute école* of chariotry was at the Hittite capital, Hattusas. In the famous Tavagalavas letter the Great King of the Hittites (unnamed), writing to the king of the Achaians

¹ Champollion, *Mon.* i. 26; Lefebvre des Noëttes, fig. 43; cf. Wreszinski, *Atlas*, ii. 170, for a drawing of a large section of the battle.

(also unnamed), recalls how he himself, his correspondent's brother, and Tavagalavas had in earlier days been used to ride in a chariot with the Hittite 'master of the horse' which may serve as a title to describe an official shown by the context to be of standing and importance.¹ This is generally interpreted to mean that the young Achaian prince had visited Hattusas to receive instruction in the art of chariotry. At Ugarit the Mycenaean who formed a considerable part of the city's population must have come to know the Syro-Hittite chariot, an arm to which Ugarit attached great importance; they may well have seen it in the field, since Ugarit was generally an active ally of Egypt in the frequent clashes of the two empires. To Cyprus, however, the Greeks brought their peculiar form of chariot, the dual-bodied, though it may have served, as in the vase-paintings, a merely ceremonial use. In the Iron Age it was superseded by a form with rounded front and no extension at the side, which frequently occurs as a terra-cotta model. On a Cypriot vase in the British Museum dated c. 600 (Pl. XXV, 2)² a chariot of Assyrian type is represented which has a box-body armoured with scales, presumably of metal. The occupants are a charioteer and an archer; the latter wears a dark, sleeved jerkin, presumably of leather. (Cf. Achilles and Penthesilea on the Tiryns shield, Pl. IX.) He faces to the rear and discharges an arrow in that direction, which suggests flight before a pursuing enemy rather than a scene of the chase. The bow appears to be of the European type, but the execution is too summary to allow of a positive conclusion. In view of the gorget worn by two of the Greeks on the Tiryns shields (Pls. IX and X; cf. *BSA*, xlii, p. 134) and by Penthesilea, accidentally omitted in *BSA*, loc. cit., it seems safe to interpret thus the lines around the neck of the archer; and this again suggests that the lines which encircle the neck of a helmeted head on a Late Mycenaean sherd (Fig. 26 *supra*) have the same significance. As late as the time of Darius the chariot was still used in Cyprus in war.³

Of Geometric battle-scenes we have enough to show that warfare was conducted in the desultory manner described by Homer. There appears to be no instance in Geometric vase-painting in which chariot meets chariot in combat; they always face in the same direction, convey the warrior to the spot where he dismounts to fight, and wait to pick him up again.⁴ Only one monument displays two chariots confronting each other in battle, viz.

¹ Sommer, *Die Ahhiyawa-Urkunden*, p. 11, col. ii, 58-62; *Abh. bay. Ak. Wiss.*, N.F. vi. The date of the letter cannot be precisely fixed, but falls in the last third of the fourteenth century, probably very near its end.

² *BM. Cat. V*, i, ii, pl. vi; for the terra-cotta type see P. et C. iii, p. 713, fig. 524.

³ Herod. v. 113.

⁴ *AJA*, xix (1915), pl. xxiii A. Here chariots in each of which stands a helmeted charioteer are interspersed with warriors on foot, mostly equipped with the Dipylon shield. For another vase see Pl. XXVI, 3 and *Hesperia*, v (1936), p. 27, and Supplement ii (1939), p. 70, fig. 44. Hampe's suggestion (*FGS.*, p. 88) that the warrior and charioteer who attempt to mount the chariot simultaneously are the Molione, though not demonstrable, seems to be well founded; no independent charioteer would have left the chariot.

a Boeotian fibula of the seventh century,¹ which cannot rank as an authentic witness to eighth-century practice. On each chariot, besides the charioteer, there is a warrior armed with an exceptionally long spear with which he thrusts at his opponent.

THE CHARIOT IN HOMER

The same story is told more explicitly by Homer. Firstly, we may note that as in the earliest examples of Geometric figure-painting one function of the Homeric chariot is to drive in procession at the funeral of a great man. In his own land the body of Patroklos would have been carried on a wagon, but before Troy there are only war-chariots, and his comrades carry him to the pyre; the chariots of the Myrmidons accompany him, followed by the foot.²

Passing to Homeric warfare, we find that, as Kromayer has pointed out,³ only one passage betrays any knowledge of the serious tactical use of the chariot. This is the advice put into the mouth of Nestor when arraying his forces for battle;⁴ the chariots are drawn up in the van, the foot-soldiers in the rear, the *κακοί* (light-armed troops?) in between.⁵ The chariots are to keep in line, neither dashing forward to fight nor falling behind, and the warriors in them are recommended to fight with the spear from the chariot 'since that is much better', i.e. than dismounting to fight duels on foot, a practice incompatible with keeping the line. Nestor's urgency suggests that the old discipline is at least obsolescent.

ὅδε καὶ οἱ πρότεροι πόλεως καὶ τεῖχε' ἐπάρθρον
τόνδε ἴσον καὶ θυμόν . . . ἔχοντες

are his concluding words, but no description of the tactics enjoined is to be found in Homer. Nor does his division of the troops into *ἰππῆες*, *πεζοί*, and *κακοί* agree with the familiar classification as *βασιλῆες*, *ἑταιροί*, and *λαοί*. On the other hand, the chariots do not carry the archers who made the Egyptian charge formidable; like the Hittites, the *ἰππῆες* are armed with the thrusting-spear.

Here as so often we must ask ourselves whether we are dealing with a fragment of Bronze Age tradition or with recent knowledge resulting from renewed contact with the Near East. On the whole probability points to the former alternative, not only because the advice is put into the mouth of Nestor and the practice ascribed to earlier generations, but because the thrusting-spear is the weapon of Greece in the Late Bronze Age (after which it vanishes to reappear only as that of the hoplite phalanx) and also, as just noted, of the Hittites, whom we have found to have enjoyed a

¹ *Préhistoire*, i, p. 194, fig. 2.

² Ψ 125-57.

³ Kromayer u. Veith, *Heerwesen u. Kriegsführung der Griechen u. Römer* (1928), p. 26.

⁴ d 293-309.

⁵ It is difficult to find a place for *κακοί* (in whatever sense) in the organized tactics of Egyptian warfare in the Late Bronze Age. In Greek fighting of the eighth century they presumably played a part and had to be provided for in Nestor's instructions.

reputation for chariotry in the eyes of Mycenaean Greece. Syrians and Assyrians, with whom Greece might have made contact in the eighth century, used the bow.

No clash of chariots is described in Homer, and the only passage in which such an encounter is alluded to (*A* 150 ff.) is justly suspect on linguistic grounds.¹

It has often been said that the chariot is employed in Homer merely as a means of transport, and on the whole this is true; its use, however, has nothing to do with the size or weight of the body-shield, as was argued by Reichel and his supporters. The chariot-warriors of the stela do not wear the body-shield; it appears only on the prostrate adversary of Stele I. So far as our evidence serves, the Aegaeon point of departure of the body-shield was Crete, where the chariot appears later than it does in Greece; shield and chariot therefore can have had no original connexion, nor do the monuments suggest a later one. The scene on the stela portrays the discomfiture of the native by the better-equipped invader. The regular preliminary to action in Homer is to leap from the chariot, and one of its principal uses is to carry the warrior out of danger when isolated or decisively worsted; hence the charioteer must maintain the closest possible touch with his chief,² who may remount and dismount in the course of the action without the fact being expressly noted.³ Examples of fighting from the chariot are by no means lacking,⁴ but as a rule it merely attends on the movements of the dismounted warrior and must have added greatly to the general confusion on the field. When the spear is used from the chariot, it is thrown, as we see it to be on Geometric monuments, doubtless because it was too short for an effective thrust. Archery from the chariot is unknown, alike in Homer and in Geometric art; the Greek archer shoots from the ground, and Pandaros when he mounts the chariot of Aineias exchanges the bow for the spear.⁵ The light-built Greek chariot could not carry a third man to act as shield-bearer; the charioteer could carry a shield over his back, but an archer would have been wholly defenceless.

There is little specific description of the chariot in Homer, possibly because it was a familiar object of the poet's own day. Hera's is described

¹ See Leaf, *ad loc.* Apparently the lines are a 'hoplite' interpolation, in which the *ivēēs* are cavalry. Pick used the passage in *A* as evidence for the Cypriot origin of the *stros* which he held to have been incorporated in the original *Mēis* and of which part consisted of Books *B-H* (*Die homerische Ilias*, pp. 304-5). As we have seen, the chariot was used in war by the Cypriots as late as 505, but with what tactics we do not know.

² *N* 383-6.

³ Thus in *II* Patroklos, when the rout of the Trojans begins, at first pursues in his chariot (377 ff.), but *ὑπὸ ποσσὶν* (404) shows that he is standing on the ground; yet in 427 he leaps from the chariot which he has never been said to remount. Similarly in *A* Hector drives into battle (502 ff.), but in 541 is hurling at the enemy great stones which he must have dismounted to pick up.

⁴ e.g. *O* 386 (the Trojans attacking the Greeks on their ships, a case where nothing would be gained by dismounting and where, exceptionally, they were fighting *ἀνδροχέδον*); *ι* 49, the Kikones. For individuals see *E* 15, *Θ* 118, *Π* 377.

⁵ *E* 280.

for its superhuman properties, and the account of Priam's mule-cart is not necessarily applicable to the chariot.¹ It is possible, however, to deduce from the data, such as they are, the existence of two types. One was extremely light, capable of being dragged or even carried by a man single-handed.² It was doubtless chariots of this sort which had the *ᾠτρες*, often referred to, to make which Lykaon cut the young branches of a wild fig-tree (*Φ* 37-8). The *ᾠτρες* are commonly spoken of in the plural (*Α* 535, *Υ* 300, *Φ* 38), but as only those of Hera's car are specified as double, it would seem that in other cases we have a single rail thought of in sections, front and sides. When the chariot is left to itself, it is naturally to the front rail that the reins are fastened to make the horses believe that they are effectively tied up (*Ε* 262, 322). In *Κ* 475 the same manœuvre is employed, but the reins are tied to the *ἐπιδηφριάδος πυμάτης*,³ which suggests a breastwork of some sort; it could be pierced at the top or, as in the case of the classical racing-chariot, surmounted by a rail. It is not certain that a breastwork is indicated in *Ε* 727-8, where of the *δίφρος* of Hera's chariot it is said *χρυσάοισι καὶ ἀργυρέοισιν ἱμάσιν ἐντέταται*, i.e. it is made of plaited thongs. Probably the floor is at least included if not alone designated; both are frequently represented on Dipylon vases by a lattice-work pattern. For the floor a fabric both strong and yielding was desirable to reduce the jolting of a springless vehicle over rough ground,⁴ and plaited leather thongs continued to be used for the purpose; Pollux (i. 142) mentions the *ἱμάτισις* of a chariot, the technical name for which he gives as *τόνος*, and by its relation to the next item makes it clear that it formed the floor. The epithets *ἐνπλεκτος* (*Ψ* 335) and *ἐνπλεκέης* (*Ψ* 436), each used once of the chariot, may apply to the floor or to the breastwork of the *ᾠτρὺς* chariot, which on Dipylon vases is regularly filled with lattice-work.

The pole-end support, as we have seen, is normal in Mycenaean and at least common in Geometric art, but there is no hint of any such thing in Homer; twice the horses of a chariot break the pole and escape without the mention of any other attachment (*Ζ* 40, *Η* 371). Such East Greek evidence as we have (the Clazomenian sherd and sarcophagus noted above and the miniature wheels of the Ephesian Artemision) suggest that the Ionians adopted a more orientalizing form of chariot and abandoned the traditional support; the chariot models from Olympia may represent the cars of East Greek competitors.

Those chariots to which the poet ascribes decoration in metal were presumably solid-bodied, for the *ᾠτρὺς* offers no field for such adornment; Hera's chariot is not ornamented with, but consists of, metal, a purely

¹ *Ε* 722 ff., *Ω* 266 ff.

² *Κ* 304-5.

³ *Ἐπιδηφριάς* is a *ἄρσος* λεγόμενον not merely in epic but (in this sense) in Greek.

⁴ The racing chariot of the fifth century, however, built to run over a smooth and limited course, seems sometimes to have had a solid floor, with grooves or shoes in which the charioteer placed his feet (*Eur. Hipp.* 1180). It would hardly be possible to combine *ἱμβύλαι* with a floor of leather thongs.

supernatural state of affairs. Here again we cannot say whether we have a Bronze Age feature remembered or one recently learned from Assyria, where the king's chariot is often heavily decorated. In favour of the first it must be remembered that at Megiddo the Pharaoh went into battle in a chariot plated with electrum, that those he captured were adorned with gold and silver, that of Tutankhamun, which exists *in corpore*, with gold and glass paste. In the fifteenth and fourteenth centuries the Achaeans learned the appearance of such chariots and probably imitated them. Chariots are described in the *Iliad* as ποικίλα χαλκῷ (Δ 226, K 322 and 393), that of Diomedes is χρυσῷ πεπυκασμένῃ κασσινέρῳ τε (Ψ 503); that of Rhesos is adorned with gold and silver (K 438). Such decoration must have had a wooden structure, whether of rectangular or quadrant shape, to carry it, and to this the epithets εὖξοος (B 390, δ 590), εὖξεστος (II 402), and κολλητός (T 395) would apply.

The bit (χαλινός) is mentioned only once, the collar (λέπαθνα) twice,¹ the girth not at all, unless it is included in λέπαθνα. Probably it is, for the word is used only in the plural, and we may assume that from the fifteenth century onwards collar and girth were united at the back of the animal's neck, as we see them on the gem from Lyktos, in order to lighten, ineffectually enough, the merciless pressure of the collar on the windpipe. The fact that in a comparatively detailed account of harnessing a mule-team there is no mention of the collar reminds us that the argument *e silentio* applied to Homer is as unreliable as the argument *ex absentia* applied to Geometric art. On two characteristics both Mycenaean and Hellenic, viz. the four-spoked wheel and the central axle, the poems give no information. If heroic poetry arose on the mainland—a conclusion we can hardly escape—the bards would know no other form; but we cannot make the same assumption about an Ionian poet. None the less, when Homer specifies the eight spokes of Hera's chariot-wheel, it seems likely that he does so because the number is exceptional; it may even be that the description is an interpolation, as that of Athena's arming certainly is, but the Cypriots at least must have known the eight-spoked Assyrian wheel before the end of the eighth century. We might expect the poet to give her also the elaborately decorated Assyrian chariot of the ninth and eighth centuries, but, as we have just seen, he remains faithful to the simple ὤρωξ type and enhances only the material.

For the position of the Homeric axle there is really no evidence at all. In Ψ 517-21 the distance of the horse from the wheel is taken as the measure of an extremely small space; but the condition that when the horse gallops,

¹ T 393; E 730, T 393. Only one Bronze Age bit is known from the Greek mainland; it is of bronze and comes from Mycenae (*Éph. Arch.*, 1891, p. 75; *HW.*², p. 147, fig. 90). Two of a somewhat more advanced type are reported from a LH III grave at Miletus. The natural inference is that at that date (and probably for long after) the bit was made of perishable material. See Wiesner, *Fahren u. Reiten*, p. 25, and for the examples from Miletus, *Religionsgeschichtliche Versuche u. Vorarbeiten*, xxvi (1938), p. 147.

the tip of its tail touches the tyre of the wheel can be amply satisfied with the axle at the back of the floor.¹ Tyres (*ἐπίσσωτρα*)² are mentioned several times and are naturally of metal, but the nature of the relevant monuments does not enable us to say whether the chariot already possessed them at the date of its first appearance in Greece. The Rosellini chariot from Egyptian Thebes has none.

Homer's treatment of the chariot is strictly 'Mycenaean'; in war and racing alike only a pair of horses is used. Stesichorus maintained the convention in the *Ἀθλὰ ἐπὶ Πελίᾳ*,³ and so did the artist of the Chest of Cypselus.⁴ At what time the team of four became usual we cannot tell; it sometimes occurs on Dipylon vases of a late type.⁵ The four-horse chariot-race was introduced at Olympia only in the 25th Olympiad,⁶ but had probably been practised as a sport much earlier. At the time of their entry into the Peloponnese neither the Dorians nor the north-west Greeks can have been proficient in the use of the chariot, and the latter would not be likely to encourage it at the festival which they controlled. If the team of four was known in the rugged land of Attica before the end of the eighth century, it must have been familiar in other regions at least as early. The allusion to such a chariot therefore in *A* 699 ff. need be no later, nor yet the simile in *v* 81. *Θ* 185 is an interpolation as the immediately following dual shows, whether it was simply added or displaced an earlier line.

NESTOR'S CUP

Though it is not a piece of military equipment, Nestor's cup claims a brief notice in any work on Homeric Archaeology. It is at least the appurtenance of a hero of war brought by him to the field of battle.

The famous Dove cup from the Fourth Shaft-grave (Fig. 48) has so long been popularly identified with the only cup accorded a detailed description in Homer that its actual appearance is generally a disappointment to those who see it for the first time.⁷ Somewhat under 5½ inches in height, made of ordinary sheet-gold, of poor design and unremarkable workmanship, it would seem to have little in common with Nestor's magnificent piece of plate. The unique feature of the doves on the handles, however, would give it an interest of its own apart from the very imperfect Homeric parallel; for doves, frequent in the Bronze Age in Crete and Cyprus as

¹ e.g. *MaZ.* iii, no. 147, and Nroffcr, pl. vi, no. 25.

² The implied *σώτρα* (felloe) is first mentioned by Pollux (i. 144), its place being taken by *δέσς*.

³ *Fr.* 1.

⁴ Paus. v. 17. 7.

⁵ e.g. *Arch. Zeit.*, 1885, p. 139 = *P. et C.* vii, p. 226, fig. 98. Plastic groups of four horses forming the handle of the lids of Geometric pyxides should also be noted. Three are also found (Pottier, *Vases antiques du Louvre*, i, pl. 20), figure in one episode in the *Iliad* (II 466-75), and are mentioned in the *Odyssey* (8. 590).

⁶ Paus. v. 8. 7.

⁷ *Schachinger*, pl. cix, no. 412, *Textb.*, p. 100; Schliemann, *M.u.T.*, p. 237, fig. 346 (condition when found).

attributes of a goddess, as dedications to her or as symbols of her presence, are but rarely found in Greece. They occur, however, on the miniature shrines of sheet-gold from Shaft-graves III and IV¹ and on the figurines of the nude goddess, also of sheet-gold, from III,² which contained the remains of women only. The shrines are completely Minoan in appearance, and though the same cannot be said of the nude goddess, she, too, may have reached Greece by way of Crete. Though she has no place in Cretan art, there is evidence that in a more primitive form she played a part in cult,³ perhaps in the humbler strata of society; transitory influences may have raised her for a time to a higher level. The presence of the doves suggests the east end of the Mediterranean as the quarter whence the type of the Shaft-grave figures is derived, whether directly or via Crete.

Before examining the association of birds with vessels of various kinds in the relevant areas it will be well to analyse the description of Nestor's cup. It is 'pierced with golden rivets' and has four handles, each of which is flanked on either side by a feeding dove; beneath are two *πυθμῆνες*. The account has all the apparent precision of the description of the boar's tusk helmet; unfortunately we lack in this case a material counterpart sufficiently exact to guarantee the true interpretation. There is reason to believe the passage to be traditional in substance since our only analogues, however imperfect, belong to the second half of the third or the first half of the second millennium, and there is little in the language to belie the supposition. ἀμφὶς ἑκάστον (*A* 634) merely invites the obvious correction, though it is worth noting that the expression recurs in Nestor's narrative (748) and nowhere else in Homer; elsewhere ἀμφὶς follows the accusative it governs. The only other 'modernism' is the unique *νεμέθοντο* in the next line, an example of an unaccountable secondary formation confined to a small group of verbs (*τελέθω*, *φλεγέθω*, *φαίθω*)⁴ in which it produces the metrically convenient sequence υ υ —.

With Nestor's ensuing narrative and the many problems to which it has given rise we are not concerned.⁵ Nestor is not necessarily one of the heroes originally associated with the Tale of Troy, but he might well be, as the Greater Aias seems to have been, a traditional figure of great antiquity. This by no means applies to the narratives put into his mouth, and there

¹ *Schachtgr.*, pl. xviii, nos. 242-4 (Shaft-grave IV); xxvii, no. 26 (Shaft-grave III); cf. Schuchhardt, p. 199, fig. 183; Bossert, 189.

² *Schachtgr.*, pl. xxvii, nos. 27-8; Schuchhardt, p. 198, figs. 180-1; Bossert, 194 *ε*.

³ Nude female figures of a primitive type widespread in the Mediterranean and Aegean basins and in SE. Europe were found in neolithic Knossos, and Cycladic idols, imported before the end of the Early Minoan age, in the ossuaries of the Messari. An extremely crude terracotta figurine was found in the LM III Shrine of the Double Axes at Knossos; it dates to the Reoccupation period (*P. of M.* i, p. 52, fig. 14).

⁴ P. Chantraine, *Grammaire Homérique*, p. 327.

⁵ Ed. Meyer's view (*G.d.A.* iii, pp. 202-3) that the conflicts of the Pylians with the Epeians represent those of the Bronze Age rulers of the north and west Peloponnese with the invading Dorians and north-west Greeks has much to recommend it.

is nothing in the one before us which points to the Bronze Age, though on the other hand there is nothing necessarily later than the eighth century, so far at least as archaeological evidence is concerned. There are, however, a few linguistic novelties, though there is no reason to give them a post-epic date; the principal are the unique appearance of the word *ρύσια* (674) and of *δίφρος* (748) in the sense of 'chariot and horses': elsewhere in Homer it means the body of the chariot and nothing else, *ἐμφὶς ἑκάστον* already cited occurs in the same line.

An epitome of Aristarchus' account of the cup is given in Schol. A; it runs as follows: *ἡ πρῶτον μὲν περίμηκες αὐτὸ εἶναι καὶ δύο πυθμένες ἔχειν, οὐχ ἕτερον ἐξ ἑτέρου, ὡς τινες, ἀλλ' ἑκατέρωθεν τῶν τεσσάρων ὠτων οὐκ ἐξ ἴσου τὰ διαστήματα εἶναι, ἵνα μὴ κατὰ πόσιν ἐναντίον τοῦ στόματος λαμβάνηται ἀλλ' ἑκατέρωθεν τοῦ ποτηρίου δύο καὶ δύο. τοῦτων δὲ ἄπτεσθαι μακρὰν (vel potius μικρὰν) πελειάδα μίαν ἑκατέρωθεν, ἀντεστραμμέναι δὲ εἶναι αὐταῖς, ἀνὰ μέσον δὲ αὐτῶν δύο. κατὰ γὰρ ἑκάστον τῶν ὠτων τοσαύτας φησὶν. εἶναι γὰρ ὥσπερ φιάλην κοίλην, ὥστε ταῖς δύο χερσὶν ὑπολαμβάνοντας (an -τος? Lehrs) τῶν ὠτων προσλαμβάνεσθαι.*

The grouping of the four handles in pairs at the sides of the cup instead of distributing them at the quadrants is a matter of common sense in the case of a drinking-vessel and was probably generally accepted. Some placed them one above another,² again a practical arrangement and one found, as it chanced, in Minoan pottery, e.g. on the funerary vase from the Tomb of the Double Axes, Knossos (*v. supra*, Fig. 22); it does not, however, appear in conjunction with birds and would make the disposal of a large number more difficult. According to Schol. A the *πυθμένες*, evidently taken as supports, were under the handles, one on each side; probably the statement is part of the epitome of Aristarchus, who expressly repudiated the reading *ὑποπυθμένες*, an epithet which would apply to the doves.³ For

¹ The text is that of Lehrs, *De Aristarchi Studiis Homericis*², p. 196 (1882) and is almost identical with that of Dindorf (*Homeri Ilias, Scholia*, vol. 1, 1875), who adopted Lehrs' text in all essentials from an earlier edition. He omits, however, the semicolon after the first *ἐκατέρωθεν*, which can hardly be called an emendation and greatly clarifies the sense. The Scholiast has preserved nothing on the words *ἑλαυνε πεπυθμένον*, which indeed are unambiguous. The *ἑλαυνε* are plainly rivets, such as attach the handles and stays of the Dove cup and are characteristic of all Cretan and mainland metal-work throughout the Late Bronze Age; some use is made of welding for minor joints not exposed to any great strain, but for those of structural importance riveting is the only method employed. Apelles, a toreutic artist of the second or first century B.C., seems to be responsible for the unfortunate notion that the *ἑλαυνε* were more ornaments, sham nail-heads with no structural function, a method of decoration characteristic of the 'Corinthia' of his own day; probably he thought riveting too crude a method for the age of the heroes (Athenaeus 488 c). Hence some currency has been given to the impossible translation 'embossed' for *πεπυθμένον*, against which the parallel phrase in A 246 should have been a sufficient warning, inasmuch as sham nail-heads could hardly have been attached to a wooden sceptre.

² Scholl. BT ad loc.

³ Scholl. B and T in *πυθμένες* are extremely obscure; it is not even clear whether they take *πυθμή* in the sense normal in later Greek, viz. the (central) stem of a tall cup, a feature which the poet passes over as having nothing distinctive about it, or in that of the bottom of a receptacle.

πυθμήν in the sense of a non-central support Σ 375 supplies a parallel; now that Ithaca has done likewise we need not scruple to take *πυθμήν* in Σ 375 as the leg of a tripod with wheels attached to it.¹

Of Nestor's cup it remains to add, first, that its feeding doves do not find an exact parallel in those of the Dove cup; these are represented in a flattened attitude which has been variously interpreted as one of flight or courtship. Secondly, though the *ἤλοι* are of gold, the material of the cup itself is not mentioned, an indication that in the remote original on which the Homeric description is based it was not of gold; it may have been of silver or even wood. Silver vessels with gold decoration or adjuncts are a feature of the Shaft-graves and occur in the Royal Tombs at Dendra;² in the King's tomb a wooden mug with bronze plating was found. Thirdly, it is presented purely as a drinking-vessel with no sanctity attached to it, brought from home, as we may perhaps presume the table with feet of cyanus to have been as well, however inappropriately. It may be a relic of the original passage. Generally speaking, articles of luxury in the possession of Greek heroes are accounted for as loot, e.g. the lyre of Achilles (*I* 186 ff.) and the more distinctive prizes at the Games. The cup of Achilles, however, reserved for the service of Zeus alone (*II* 225 ff.), was also brought from home, a point to which we shall return.

The fact that only the aged Nestor, who is constantly complaining of physical decay, could lift the full cup without an effort provided ancient scholars with a *ζήτημα* for which various solutions were proposed; the only one that can be taken seriously is that it was one of the regular *ἐπαυροί* of Nestor.³ This accords with the hypothesis that behind the Homeric hero looms a shadowy figure who in the legendary past held revel with his friends—possibly in Pylos.

Turning to the Dove cup, we find that its unique and unpleasing shape is due to the desire to equip the MM mug, frequent in the Shaft-graves in its simple form, with a stem like that of the contemporary tall chalice. The heavy single column-handle of the mug had now to be balanced by a second, and the consequent top-heaviness remedied by running a stay from beneath each to the edge of the foot. So far the cup is a tolerable commentary on Homer, though deficient in the number of birds and handles. When we turn to other vessels decorated with birds which are often recognizable as doves, the case is different; there does not seem to be any example of one intended to serve as a drinking-cup. The earliest instances, two in number, come not as might have been expected from Crete, but from the mainland, having been found in the Early Helladic stratum at Zygouries. The first, a small vase in the form of a bird, appears to have been one of several set on a flat ring, i.e. to have formed part of a *kernos*, a familiar and long-lived form of cult vessel. The

¹ See *BSA*, xxxv, p. 88 and fig. 15, p. 65.

² *RT*, p. 54, fig. 31.

³ Schol. A ad 635.

second, a fragment of a bird's head and neck, may have formed part of a larger vase in the shape of a bird.¹

Crete appears in the series in the Middle Minoan period, which, according to the latest dating, begins c. 2100. MM I bowls containing a clay dove attached to the bottom were found at Palaikastro;² it is true that they were found exclusively in the ossuaries, but they can hardly have been the drinking-cups of the dead. They were, as Evans points out, votives;³ others contain oxen, one a large herd of minute cattle. There is also in private possession in Crete a MM I cup with barbotine decoration and birds which look like doves on the rim.⁴ Another Minoan monument (of MM II date) is a remarkable rectangular vessel from the palace of Phaistos; it is hollowed out of green steatite, and on the outer surface of each of the longer sides two birds are engraved whose collars mark them as ring-doves.⁵ This is presumably a libation vessel. In LM III we have our first Cretan examples of birds attached to the handles of vessels; two clay handles found at Knossos have fragmentary birds attached to them. Unfortunately we have no clue to the shape of the vases.

The absence of birds as handle ornaments from Mycenaean pottery is the more noticeable because handles with zoomorphic terminations, though not common, are by no means lacking. The Treasure from the Grave Circle at Mycenae, probably part of the contents of a Shaft-grave, includes four goblets whose handles end in the heads of dogs biting the rim;⁶ the one surviving double handle of the Warrior vase terminates in a plastic ox-head.⁷ A small oinochoe from Haliki in Attica has besides its normal handle four coils with animal heads distributed round the neck.⁸ Plainly the Mycenaean potter took no interest in doves. The only drinking-vessel with a bird is of a new type, being a bronze mug of the LH III Ialysos type, the only metallic example known, which formed a part of the Tiryns hoard.⁹ Besides the usual vertical loop handle at the waist it has a secondary handle, or rather thumb-rest, in the shape of a bird of duck-like appearance perched on the rim. It cannot possibly be taken for a dove; and the vessel has no connexion with Nestor's cup. The cumbrous structure of this latter and its plethora of doves suggests that, secularized as it is, it had its ultimate origin in some ritual vessel of which the Dove cup is also an attenuated version. The doves, as has been said, have their origin farther east, and it is worth while to glance for a moment at a re-

¹ *Zygouriet*, p. 85, pl. xxi, 6; pl. xxi, 2.

² BSA, Supplementary Paper I, *The Unpublished Objects from Palaikastro*, pt. i, p. 11, pl. vi.

³ *P. of M.* i, p. 180; cf. fig. 170 a and b.

⁴ I owe this information to Mr. R. W. Hutchinson, late Curator at Knossos. I have not seen the vase, which has not been photographed.

⁵ Pernier, *Il Palazzo Minico di Feste*, i, p. 256, fig. 115 a; Bossert¹, 373.

⁶ Schliemann, *Mycenae und Tiryns*, p. 350, fig. 528; Schuchhardt, p. 275, fig. 260.

⁷ F. and L., pl. xliii, 2.

⁸ *AM.* lv (1930), Bell, xxxiv, no. 1; Bossert², 163.

⁹ *Ibid.*, pl. xix, no. 137, Textb. p. 37.

markable pedestalled cup with doves on the rim from Vounous-Bellapais in Cyprus,¹ one of a series of kindred though not identical vessels. They all come from a series of chamber-tombs dating to c. 2600-2100; they are certainly not drinking-cups in the ordinary sense and are accompanied by

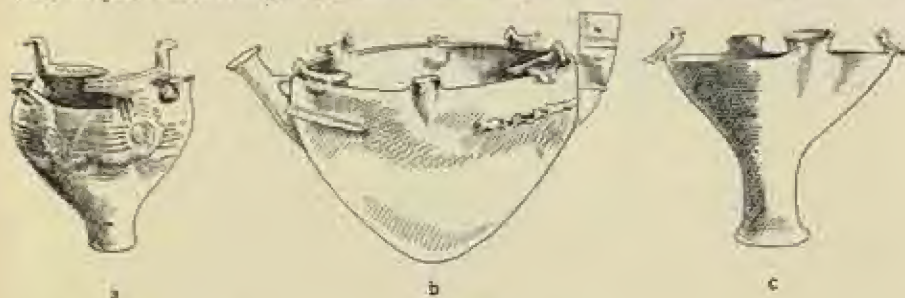


FIG. 47

other ritual vessels similarly adorned. Each has on the rim a pair of doves and a pair of small cups alternately marking the quadrants.² The birds are normally set at right angles to the rim, facing indifferently inwards and outwards (Fig. 47 *b* and *c*); on one cup, however, two of exceptionally large size are perched lengthwise like nightjars and the cups are within reach of their beaks, as though to enable them to feed (Fig. 47 *a*).³ There is nothing but the doves to connect these vessels with either Nestor's cup or the Dove cup, for they have no handles and consequently no *ποθμῆνες*, but the shape links them with a series of Early Minoan cups from Nirou Khani on the north coast of Crete a few miles east of Candia. Some of the Cypriot cups which lack the rim decoration are virtually identical with the Cretan specimens in appearance.⁴ Moreover, Syrian and Cretan contacts with Cyprus are found in this period and Anatolian influence on the pottery is apparent.

The Nirou Khani cups are not the earliest Cretan examples of their type, which occurs at Knossos in the sub-Neolithic period, handleless like the Vounous specimens; some of the Early Minoan cups have a single⁵ handle. The history of the stemmed cup in Crete is carried

¹ Excavated by Mr. P. Dikaios and published in *Archaeologia*, lxxxviii, pp. 1 ff. A dove cup of the Vounous type is included in the pottery from Troy exhibited in the museum at Istanbul. This is certainly due to misplacement; Schliemann would have mentioned any cup with birds on it, but I have failed to trace any reference to it in his books on Troy, nor is it mentioned by Schuchhardt or in *Troja und Ilion*. Besides the Trojan material there is in the museum a small collection of Cypriot ware; there can be little doubt that the dove cup was originally an item in it. The general resemblance of the fabric to the dark monochrome ware of Troy would lead naturally to the error, for the Cypriot collection consists mainly of the white 'milk-bowl' ware decorated with geometric designs in dark paint.

² *Archaeologia*, lxxxviii, pls. xv and xvi.

³ *Ibid.*, pl. xiv c.

⁴ *Ibid.*, pl. viii.

⁵ *P. of M.* i, p. 58, fig. 17 (sub-Neolithic), and p. 59, fig. 19 (Early Minoan from Nirou Khani and Arkalochori).

on by a scene in fresco from the Palace at Knossos, convincingly reconstructed by Evans from a few fragments.¹ Here the vessel is used like a loving-cup, passed from one male hand to another; so much is beyond all doubt. Further, it seems that the persons concerned are two

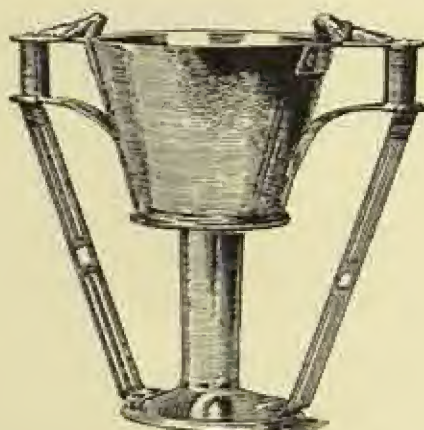


FIG. 48

youths, sitting confronted on seats which resemble camp-stools, a type which in Minoan art repeatedly serves as the throne of the Great Goddess. The cup is possibly sacramental; the scene is at all events one of stately ceremonial. In spite of its two handles the cup is grasped by the stem.

A stemmed cup, then, which by the end of LM I or very little later² had acquired a pair of handles has a certain ceremonial significance in Crete, a fact which may explain the mounting of the flat-bottomed Minoan mug on a stem to form the Dove cup of the Shaft-grave.

To sum up: we have evidence that Anatolian culture played a part in Cyprus in the second half of the third millennium, the shape of one of the vases with which it is associated being found contemporaneously in Crete. There is also evidence for the existence of the Dove cult in Crete from the beginning of Middle Minoan (c. 2100 according to the most recent dating) till the end of the Minoan age and the doves are from the first sometimes associated with vases. On mainland Greece doves as religious symbols are found in Shaft-graves III and IV and at no later period, and in one instance they are associated with a stemmed cup. There is no reason to think it of other than native workmanship, a circumstance which may account for its clumsiness. The doves indicate that it had some symbolic significance, possibly that of royal authority. On this hypothesis the type would probably survive for some time; as the demand would be limited,

¹ *Ibid.* 17, p. 389, fig. 324; cf. fig. 323 and colour plate xxxi.

² The fresco cannot be later than the fifteenth century and may go back to LM I. See Evans, *loc. cit.*, p. 396.

we need not be surprised that the Dove cup is unique. It can be confidently said, however, that the King of Dendra did not possess one—whether because he was only a vassal of the lord of Mycenae or because the symbol lasted only through the two centuries (c. 1600–1400) in which Minoan influence on the mainland was strong. Meagre and unsatisfactory as the evidence is, it justifies the conclusion that the Homeric description is that of a cup related in some degree to the Dove cup and has been transmitted, very possibly with modifications, from the Bronze Age, possibly from LH I.¹

One other cup of note is mentioned in Homer,² though unfortunately it receives no more distinctive epithet than *τερυγμένον*, that namely which Achilles brought with him from his home and kept sacred to the service of Zeus alone. This sanctity of a vessel associated with the kingly office—since the Homeric king is *θεός*, *διοτρεφής*—may well be a legacy from the days of Minoan influence on Greek religion, which we have seen to be at its maximum in LH II.

THE AXES OF ODYSSEUS

The axes used in the contest of the bow do not properly enter into a discussion of arms, for they represent rather a hoard of metal than weapons of war. Their association however with the composite bow virtually settles the question of their shape; they must represent the bipennis, the regular weapon of the Amazons in Hellenistic art, certainly therefore linked in the Greek mind with Anatolia. (See Monro, *Od. XIII–XXIV*, p. 176, fig. A=HE², p. 351, fig. 138.) Much earlier examples (surprisingly missed by Helbig) exist in the form of miniatures in gold, found in Lydia; to judge by appearances, they go back to the archaic period (*BCH*, iii, pl. IV, P. et C. v, pp. 296–7, figs. 204 and 206; cf. *AO*, pl. LXXXV, β and γ). The strongly recurved edges of these double axe-heads form an almost enclosed circle *πρώτης στέλειης*; the axes, set upright in the floor of the megaron, would offer in these circles an intermittent tunnel, from whose last section the successfully shot arrow would emerge *θύραζε*. (Monro ad φ 421–2.) The shape therefore is suited to the contest, presumably one practised in Anatolia, and it fits the text (τ 572–8). Despite the formidable arguments presented in the articles of Mr. Stubbs (*C.R.* lxij, 1948, pp. 12–13) and Sir John Myres (*Ibid.*, p. 113) I adhere to Monro's opinion (q.v.) and hold that the balance of the evidence is in favour of the axes being set up in the megaron, not the aule.

¹ A. Furmark's article 'Nestor's Cup and the Mycenaean Dove Goblet' (*Erasm. Rudbergianus*, xlv, pp. 41–53) appeared after my manuscript had gone to the printer, and in view of the fact that it contains destructive criticism only, the positive solution being reserved for a subsequent article, it would be inopportune to discuss its contents here. Against his denial of any connexion whatever between the two cups I would, however, urge that the translation of *ποθήκη* as a non-central support is justified by the evidence of the wheeled tripod leg from Ithaca (p. 331 *supra*), and that in the Late Bronze Age alone do we find doves associated with vessels whose ritual use might well disappear from the poetic tradition. The Shafi-grave goblet could be drunk from, and probably was.

² II 220 ff.

CHAPTER VI

DRESS

I. PINS AND FIBULAE

THE subject of dress in Homer, so far at least as that of women is concerned, is difficult and unsatisfactory. The data, archaeological and literary, are few, and the latter at least are confusing. It is hardly necessary to say that no actual dress has come down to us from any date within the period concerned. Representations dating to the Bronze Age are either irrelevant, as are almost without exception those of LH I and II, or, as is apt to be the case in LH III, too summary in execution to be serviceable; in the crucial period of the Early Iron Age they are non-existent. In the eighth century the conventions of Geometric art make the interpretation of dress as represented on Geometric monuments a hopeless task. When we turn to the poems, we find that the vocabulary, though fairly ample, is baffling, for there is almost no direct description, and many of the terms used receive little or no illumination from later Greek.

Nevertheless, many points in the interpretation of Homer were established by the fundamental studies of Helbig and Studniczka;¹ and on one point where adequate archaeological data were lacking subsequent excavation has thrown light. This is the use of pins and fibulae respectively in connexion with the dress of women; and as both these adjuncts are found (though not necessarily associated with the dress of women) before the end of the Bronze Age, are in continuous use throughout our period, and, when representational art fails us, afford the sole evidence available for dress, it will be convenient to begin with a brief account of them. Since, however, in the matter on which Studniczka went astray and induced Helbig to change his first and better thoughts his conclusions have been commonly accepted by editors of Homer, it will be well to clear up this point before proceeding to a chronological survey of the available material. In the first edition (1884) of *Das Homerische Epos* Helbig had declared in favour of a 'one-piece' women's dress opening down the front by a slit which was fastened by a row of fibulae or clasps (*Hefstel*) and was long enough to allow of the dress being pushed off the shoulders when they were undone, rightly maintaining that this alone fitted the account of Hera's dress in Σ 178-80 and also squared with the way in which Athena gets rid of hers in *E* 734.² His theory was open to criticism on the grounds

¹ i.e. the chapter on Dress in *HE*, ¹ and ² (1884 and 1886) and Studniczka's monograph, *Beiträge zur Geschichte der altgriechischen Tracht* (1885).

² Both ancient and modern scholars attach undue importance to the verb *καίρειναι* and to the ease with which Athena gets rid of her peplos. All that can really be said is that it is not

that positive evidence from Greek monuments was lacking, that Etruscan material, on which he laid considerable stress, was not necessarily relevant, and that he assumed for women's dress in Homer an Oriental origin which there was at that time nothing to substantiate.¹ These points were all made by Studniczka, who in the following year published his monograph on the early history of Greek dress, thus putting the question on a wider basis. He gave an admirable account of the historical problem as it then, in the early days of Mycenaean excavation, presented itself, and applied his solution of it to the interpretation of the Homeric text. Recognizing that the epics embody a tradition much older than Homer, whom he put in the eighth century, he rightly contended that at the time of its formation Greek women presumably wore the dress described by Herodotus² as universal in Greece until the introduction of the Ionic chiton. This dress, it will be remembered, though admitting of local variations, was in essentials identical with the Dorian woman's dress in the classical age and was distinguished by the fact that, unlike the Ionic chiton, it required pins to keep it on. Accepting the criterion of Herodotus—the use of *περόραι*—as adequate to diagnose Doric dress, Studniczka of necessity ascribed this form to the dress of Hera and also to the peplos with twelve *περόραι* presented to Penelope by Antinoos, cases which will be discussed in detail later. A further consequence followed. Since Penelope's *περόραι* were definitely described as fibulae, it followed that fibulae were the normal fastening of the Doric peplos;³ and Studniczka makes the further tacit assumption that this is the only meaning of the word, not only in Homer (which is at least near the truth) but in Herodotus and Sophocles. The opinion seems to have been generally held by scholars, as will be seen on reference to the translations and editions of Rawlinson and Stein, Campbell, Jebb, and Schneidewin-Nauck. All alike appear to assume that 'brooch'⁴ is the primary, if not the only meaning of *περόρη*, though in fact its unquestioned kinship with *περάλιν* shows that its basic meaning is simply 'the thing

pulled off over the head. The account is characteristically summary. In *Σ* we are not even told that Hera removed any garment.

¹ It is true that he fell into a curious error in the interpretation of the Doric peplos with open side as portrayed in black-figure vase-painting, regarding it as an Oriental dress opening down the front. Here Studniczka gave the correct explanation.

² *v.* 87-8.

³ Though women's dress in Homer is not Doric, and though there is no evidence that the Dorian woman's chief garment was called peplos in the classic age, the terms are retained because they are in general use.

⁴ 'Brooch' is an unavoidable translator's evasion for safety-pin or fibula. 'Brooch' in modern speech normally means a fastener consisting of a pin hinged to a shield, whereas 'fibula' is used by archaeologists to denote a fastener made on the same principle as a safety-pin: i.e. its essential feature is that it consists of a single length of metal wire coiled on itself at its middle point so as to form a spring. The back may of course be beaten out flat, or amplified and enriched in an infinite number of ways. The brooch was known in Greece as well as the fibula, which it superseded not later than c. 400 B.C., and certain fibulae have an entirely brooch-like appearance (e.g. the ivory plaque fibulae from Sparta, which consist of an ivory plaque attached to the back of a simple fibula in a plane at right angles to that of the safety-pin).

that goes through', while the verb *περονᾶν* is used for transfixing with a spear. Moreover, there is no other word in ordinary use to denote the straight pin,¹ which is older in Greece than the fibula and probably in most regions commoner. Nor does it seem to have struck these eminent scholars that a safety-pin, however large, is an unhandy instrument with which to murder a man, and not particularly apt even for putting out one's own eyes. Either end would be better served by the Victorian hat-pin, a lethal weapon on occasion, of which the Greek bronze pin, with its thicker stem and blunter point, is merely a robuster and more reliable, though less obviously dangerous, version. We are now, however, in a position to put arguments from probability aside, since we have direct archaeological evidence that in most regions the normal fastening of the Doric peplos was a pair of straight pins, one on each shoulder, and that their place was but rarely taken by a pair of fibulae. Examples of both were observed by Orsi when from 1891 to 1895 he excavated at Syracuse the del Fusco cemetery,² most of the graves in which dated to the late eighth or to the first half of the seventh century. Here fibulae, though slightly more numerous than in the cemetery of Megara Hyblaea, where 1,000 graves yielded a bare ten, were very few in comparison with the straight pins and did not as a rule in the women's graves take their place at the shoulders of the skeleton; they were generally an addition to the straight pins and therefore used for some other purpose. Straight pins, on the other hand, generally of bronze, sometimes of iron, occasionally of silver, were extremely common and were of familiar Greek types, having almost always disk heads and a series of globules or corrugations on the upper part of the shank; they commonly occurred in pairs, at shoulder-level, one on each side of the skeleton.³ The explanation was obvious and was explicitly given by Orsi in the following words: 'Le fibule in bronzo sono piuttosto rare nelle tombe greche, perchè supplivano all' ufficio di appuntare il chitone i grandi spilloni di bronzo e di argento che rivengono sempre all' altezza delle spalle.'⁴

Orsi's discovery and conclusion, important as they were, do not seem to have attracted much attention at the time. Thiersch, the first to point out (in 1906) as a general principle that straight pins, not fibulae, are the normal fastenings of the Doric peplos, did not quote Orsi, but relied on

¹ *βελώνη* appears to be used in Schol. A on *E* 421 to specify the pin of a fibula, but does not seem to have had this sense in classical Greek. On 425 the comment is *ἐπὶ τῇ χροσῇ παρά τῃ ὀφρῇ τῆς κορυφῆς*.

² It is true that we have evidence from three sites of the eighth and seventh centuries—Colophon, Halos, and Vroulia—that fibulae were used in these places to the exclusion of straight pins as shoulder-fastenings. *V. infra*, pp. 348, 349, 345. The Colophon cemetery may go back earlier. Thiersch, the first archaeologist to attack Studniczka's assumption that the fibula was the normal fastening of the Doric peplos, could find only one representation of it serving this purpose, on an archaic terra-cotta (*Arg. Her.* ii, p. 25, fig. 35 = *Ost. Jh.* v (1902), p. 221, fig. 65), to add to Studniczka's Peitho similarly equipped (*op. cit.*, p. 99, fig. 30).

³ *N.d.S.*, 1893, pp. 445 ff.; 1895, pp. 109 ff.

⁴ *Op. cit.*, 1895, p. 149.

two groups of monuments—firstly, the terra-cottas found at the Argive Heraion and elsewhere which represent a seated female figure with a disk-headed pin at each shoulder from which heavy chains are suspended, and secondly, Attic vase-paintings.¹ Of these latter, one, that of the François vase, is dated to c. 570–560; the others are distributed through the first three-quarters or so of the fifth century. From c. 400 onwards fibulae are seen no more and straight pins are rare, their place being taken, according to Thiersch, by sewing and buttons,² both of which play a great part in connexion with the Ionic chiton in the fifth century. His contention, however, is not strictly correct, for the round brooch which, according to the evidence of vase-painting, had long secured the chlamys of the traveller sometimes in the fifth century fastened the Doric peplos and even on occasion the Ionic chiton, and appears on Hellenistic monuments as an adjunct of female dress,³ while allusions in literature show that pinned garments were familiar. Nor can the Doric peplos well have owed its statuesque folds to buttons and sewing, as Thiersch implies. Fibulae, however, are no more, and Alexandrian scholars must have known much less about them than we do; it is not surprising that the Homeric scholia on dress contain nothing of any value.

Returning to the contribution which excavation has made to the evidence, we must note that at present our information regarding the disposition of pins and fibulae about the body is derived mainly from the graves of two cemeteries—the sub-Mycenaean part of the Kerameikos at Athens⁴ and the del Fusco cemetery at Syracuse. It is therefore worth while to consider in some detail the data they afford.

The sub-Mycenaean graves of the Kerameikos, whose testimony on this matter is all that is available from that cemetery, tell the same tale as that of the del Fusco. Bronze pins were found in eighteen graves, generally in pairs, one pin at each shoulder. At the opening of the Iron Age therefore, and again at and after the end of the Geometric period, we find the straight pin playing the same rôle in relation to women's dress. In both cemeteries fibulae are sometimes found in addition; only once in each was their number as high as twelve,⁵ and their disposition generally suggests that

¹ *Argins*, i, pp. 404 ff.

² A possible alternative to buttons is pointed out to me by Dr. Jacobsthal. Round-headed studs whose two members are sometimes attached by a minute chain are known; three in the British Museum come from a tomb of early Hellenistic date (*BM. Cat. Jew.*, pl. xxxix, nos. 2057–61). They are elaborate specimens; a very simple example, unfortunately quite undatable, was found at Troy (Schliemann, *Ilios*, p. 460; H. Schmidt, *Schliemann-Sammlung*, p. 235, no. 5953). All these specimens are of gold.

³ For examples see below, Appendix, p. 402 f.

⁴ The proto-Geometric graves, containing cremations only, afford no evidence as to the arrangement of pins about the body.

⁵ In each of these cases the number exceeded twelve and in any case affords no precedent for the gift of Antinous to Penelope. In Grave 108 of the Kerameikos there were 13, in Grave CCCXVIII of the del Fusco cemetery, 25. Orsi unhesitatingly declared this grave to be non-Greek.

they were used to fasten a shawl or over-garment of some kind. In the Kerameikos the straight pins were normally of great length, some measuring as much as 15 or 16 inches, the largest 18½. Fibulae rarely occurred unaccompanied by at least one pin; in no case did they form a pair, one at each shoulder. The dead appear to have been buried in their normal dress with its metal adjuncts, but with no gifts but pots which presumably contained food and drink. There were no weapons. Hence, apart from the pins and fibulae, whose use was not uniform and could not be prejudged, there was nothing but the bones by which the sex of the skeleton could be determined. Fortunately, several skeletons with shoulder-pins were pronounced by expert opinion to be female, while no skeleton which was definitely identifiable as male possessed them; the excavators consequently felt justified in accepting a pair of shoulder-pins as a criterion of sex. One skeleton judged to be male (Grave 43) had a single fibula on the right breast and no pin; another (33) which had a single fibula beside the right upper arm was also probably male. Of the skeletons taken to be female those in Graves 15 and 16 had a pair of shoulder-pins and nothing else. In 2, where the position of the ornaments had been disturbed by the action of water, there were two long pins and four fibulae. In 27 there was a pin on each shoulder of the skeleton, a fibula on the right breast and another by the right side of the neck. In 42 there were a pair of shoulder-pins and four fibulae, one on the right breast and another by the right side, one by the left shoulder and one by the left side. In both 46 and 47 there were a pair of shoulder-pins and on the left breast a fibula. In 70 there was a long pin on each shoulder, two fibulae at the top of the breast, and a third resting on one hand. In 108 there were thirteen fibulae distributed all over the body, two pins on the right breast and one on the left. The following arrangements were exceptional:

- 41. Girl: one long pin on r. breast; fragment of a fibula, position not specified.
- 52. Woman: on l. shoulder, pin; beside r. hip, three fibulae.
- 53. Woman: on l. shoulder, pin.
- 85. Girl: on l. shoulder, two pins.
- 99. Woman: on l. shoulder, pin.
- 101. Girl: one long pin, position unspecified.

The single pins of 53, 99, and 101 perhaps indicate the practice later ascribed to unmarried Spartan girls of fastening their garment on one shoulder only.¹

It is clear that eighteen interments cannot represent the entire female quota in a total of 112. Unless many were buried not in their normal attire but in shrouds, it must be inferred that 'Doric' dress was making its way slowly and that the majority still wore the shaped and sewed dress

¹ Scholl. MB on Eur. *Hec.* 934; Ael. Dionys. ap. Eustath. on *Iliad*, xiv, p. 975. 37; *Et. Mag.* s.v. *ὑπερίστω*; Callim. fr. 225 *ἑσθέρη δὲ δέσμιος χάρυπόμορος ἐστὶ*, possibly a description of Helen still unwedded. The reading *ἐπὶ θέρει* in Eust. and *Et. Mag.* shows that *ἑσθέρη* of the scholia should be emended to *ἑσθέρη*.

which preceded it.¹ There is no indication whatever in the Kerameikos cemetery of any racial change in the population at the transition either from Mycenaean to sub-Mycenaean or from sub-Mycenaean to proto-Geometric. The pottery, which supplies the bulk of the evidence, merely shows simplification of ornament and, as time goes on, an increasing sturdiness of form; the imitation of metallic shapes wholly ceases. The Mycenaean aristocracy must have disappeared, the last traces of Mycenaean tradition have vanished, and the times might well favour the adoption of the simple pinned dress. Though there is no evidence whatever that Attica was ever occupied by the Dorians, small infiltrations of the stock may have helped to spread their costume. Since there is no trace of it in LH III, it is reasonable to associate it with the southward spread of the invaders.²

The dead of the del Fusco cemetery were as poorly equipped as those of the Kerameikos, thus testifying to the truth of Phylarchus' statement³ about the frugal habits of the Syracusans. Many graves contained nothing but the skeleton, many only a few poor vases; a considerable number yielded a pair of pins and nothing else. These were regularly found one at each shoulder of the skeleton. In a few cases they were accompanied by a trinket or two⁴ or a spindle-whorl, which showed the grave to be a woman's. In view of this fact and of the monumental evidence which begins to be available in the sixth century, Orsi was justified in his conclusion that the many graves which contained a pair of shoulder-pins and the few which had a couple of fibulae in the same position alike belonged to women.⁵ Further, it is reasonable to infer that the considerable number which contained nothing but the skeleton were those of men. The graves of young children sometimes yielded a single fibula. Immature skeletons accompanied by a single pin or fibula were taken to be those of lads. It is certainly improbable that Syracusan girls of the eighth and seventh centuries went about, in the language of Callimachus, *ἑρερόποροι*, and in later days we have evidence both literary and monumental that boys fastened their chlamys with a brooch on one shoulder, but relinquished the habit on or soon after admission to a gymnasium.⁶ A few adult skeletons

¹ *V. infra*, p. 369.

² Northerly connexions of the pinned dress are indicated by the fibulae and pins in the graves at Theotoku in Thessaly, near the tip of the Magnesian peninsula (*Presb. Thess.*, pp. 212-13 and fig. 147) and the spectacle brooches and pins from graves at Chauchitza, some 30 odd miles north of Salonica (*BSA*, xxiv, pp. 30 ff. and pl. i, figs. 10 and 11). The sex of the owners could not as a rule be determined, but in one case at Chauchitza the skeleton had a bronze fibula on each shoulder and a number of ornaments which indicated a woman. Theotoku dates to the Early Iron Age, Chauchitza to the seventh century.

³ *ap. Ath.* xii. 20 (521 B).

⁴ e.g. CCIV: *N.d.Sc.*, 1895, p. 132.

⁵ So far as appears, no anatomist was consulted. This seems strange to-day, especially in view of the scientific exactitude which characterizes Orsi's work. The question was presumably one of expense.

⁶ Cf. a terra-cotta figurine of a boy draped to the knee in a chlamys which is fastened on the r. shoulder by a round brooch (Bieber, *Entwicklungsgeschichte der gr. Tracht*, pl. 15, 1) and an epitaph of c. 100 B.C. from Samos (*Abhandl. der preuss. Ak. der Wissensch.*, 1909, pp. 62-3 =

had a single pin or fibula.¹ These were presumably male, for in later times the round brooch which is common in art from the fifth century onwards is frequently used by men in certain circumstances, e.g. by the traveller to fasten his chlamys,² by men going out on active service,³ and at a later date by professional soldiers.⁴

In view of the very large number of graves involved it is unnecessary to enumerate all those which contained shoulder-pins. The most interesting variations of the usual arrangement are as follows:

CII, p. 475:⁵ pair of large iron pins, lying about the groin, and smaller pair, one at each shoulder.

CXXIX, p. 482: on r. breast, two groups, each of three small fibulae hooked one into another and therefore not in position on the dress. On l. shoulder one large fibula.

CLXV, p. 125: one large iron pin on centre of breast, small fibula beside head. One spindle-whorl. This looks as if the occupant had worn a pinless Ionic chiton; a himation secured by a pin and a head-dress by a fibula.

CCV, p. 133: besides the usual shoulder-pins, one small fibula on breast.

CCCCXII, p. 164: two fibulae on breast.

It is possible that these corpses wore an Ionic chiton opening down the front and secured with fibulae. The first, of course, wore as well the Dorian peplos, which in art is often combined with the linen chiton.

CCCCXXI, p. 165: two small fibulae and two small disk-headed pins immediately beside skull; at each side of head a large fibula.

CCCCXXXVI, pp. 172-3: iron shoulder-pins, two ivory brooches on breast. This again suggests a chiton with an opening fastened by the brooches. It can hardly have fastened a himation, which would not be worn with unprotected pins on the shoulders.

CCCCXLI, p. 175: one large fibula on each shoulder, two small ones (in the form of animals) under the chin; these latter were fastened, the other two were open.

Returning to Attica and to the proto-Geometric age, we find that the cremation graves of that period in the Kerameikos yielded pins and a few fibulae associated with the remains of men and women alike.⁶ Fibulae are more frequent in the later graves. A cremation grave in the Agora,⁷

Nordionische Steine, pp. 62-3). The relevant lines are: Ἀπὸ γὰρ ἐξ αὐτῶν ποσάμματα θήσαντο καὶ ποσάμματα ἐξέσθαι πόρρα.

¹ e.g. ccviii, l.c., p. 133, iron pin; cccxlii, p. 138, two interments, one with a bronze, the other with an iron pin; cccvii, p. 161, fibula; ccccxccvii, p. 172, fibula.

² e.g. by Pelops, *Gr. Vm.*, pl. 67; *MuZ.*, 583.

³ Lycurg. *Contra Leocr.* 40.

⁴ Theocr. xiv, 65-6. It is of course only an inference that the πόρρη and ποσάμμη implied in the Samian epigram, in Lycurgus and in Theocritus, are the round brooch; but pin and fibula are no longer in existence in the Greek world, and the round brooch is the standard form.

⁵ The page references are to Orsi's two reports, *N.A.Sc.*, 1893 and 1895, the first two to the earlier, the remainder to the second. Orsi used Roman numerals to designate the Greek graves in order that they might be distinguished at a glance from the fairly numerous intrusive barbarian interments.

⁶ *Ker.* iv, pp. 25-6.

⁷ *A.J.A.* xxxvi (1932), p. 386.

in which an amphora which contained the ashes also held two iron fibulae and two straight iron pins, belongs to the end of the period. In the Kerameikos, besides fibulae, straight pins continued to occur,¹ though generally in such a fragmentary condition that their number could not be estimated. Graves 15 and 16, however, each contained a pair of pins with a single swelling or bulb a little way below the head; the shanks were of iron and the bulbs of bronze. This curious combination of metals also occurs at Theotoku in Thessaly² in Tomb B, where a female skeleton was found with three pins with bronze heads and iron shanks and fragments of three others. Three were at the shoulder, one on the breast, and two at the waist, an enigmatic arrangement which the possible presence of an iron fibula does nothing to clarify. Tomb A in the same cemetery contained four skeletons, two male and two female, placed one above the other, and four bronze fibulae, of which three were at shoulder-level and one at waist-level. Here again we can form no conjecture about the dress which they accompanied. Tomb C, the last of the group, contained a child's skeleton and a bronze fibula. Rings, mostly of bronze, occurred in all three, suggesting a slightly higher standard of luxury than that which prevailed in the Kerameikos, where only two proto-Geometric graves, both women's, yielded a few bronze rings. Spectacle fibulae and pins entirely of iron were found in the somewhat later tholos tombs of Marmariene,³ some twelve miles from Larissa; though the rite was inhumation, there is no record of the position of the pins or the sex of the owners. In the Kerameikos pins wholly of iron are known from the beginning of the proto-Geometric period, rather earlier, in the opinion of the excavators, than at Marmariene.⁴

In Tomb A at Moulaniá in Crete⁵ two bronze fibulae of an early Iron Age type were associated with the inhumation, to which also belonged two bronze swords and fragments of a third and one single-bulb bronze pin; and at Assarlik in Caria⁶ five or six bronze fibulae of the same type, whole or fragmentary, occurred in conjunction with exclusively iron weapons (lance-heads and daggers or knives) and with cremation. No pins are

¹ In Gr. 5 (*Ker.* i, p. 220; not mentioned in the inventory of the tomb, pp. 97-8) and Grs. 9, 11, 13-16, and 20, pp. 183-94; *Ker.* iv, pp. 25-6.

² *Prék. Thess.*, p. 213. Pins of Geometric or later date in which the two metals are combined have been found at Perachora (*Perachora*, i, p. 174, type F), at the Argive Heraion (*Arg. Her.*, pl. 85, p. 234, nos. 700-19), and at Olympia (*Ol.* iv, p. 183, no. 1131).

³ *BSA.* xxxi (1931), pp. 35-6.

⁴ *Ker.* i, p. 220, n. 2.

⁵ *Eph. Arch.*, 1904, p. 26, fig. 7. Xanthoudides, who regarded the inhumation as Mycenaean and therefore older than it actually is, thought that similar remains might have been cleared away from the other side to make room for the cremation, with the implication that some of the grave-goods might have been added to those of the extant inhumation. There is no positive evidence for the hypothesis, nor has it any particular probability, now that we know that no abnormal interval need be allowed for between the two depositions. Nor does the inhumation equipment appear excessive for a single individual. The tomb, however, was not scientifically excavated, but opened by a peasant; we cannot therefore feel sure that we are dealing with an uncontaminated trousseau.

⁶ *JHS.* viii, pp. 70, 73, and 74, and fig. 17.

recorded. At Vrokastro¹ in Crete sub-Mycenaean and proto-Geometric chamber-tombs in which both inhumations and cremations were found yielded both straight pins and fibulae. Fibulae show here no tendency to diminish in number as cremation becomes more frequent, and are abundant in the Geometric 'bone-enclosures' of the same site (Fig. 49). In one of these a pair of straight pins was found.²

Out of forty-six proto-Geometric graves excavated at Asine seven con-

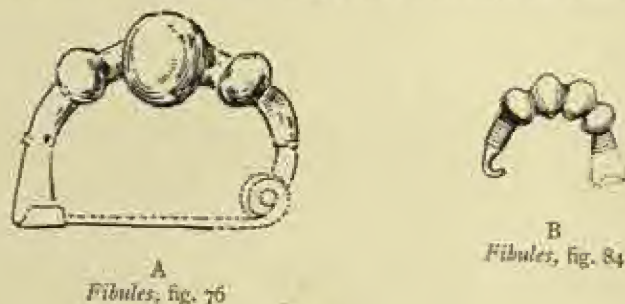


FIG. 49

tained one or more straight pins of bronze or iron.³ Unfortunately it was impossible in most cases to determine the sex of the owners; but in one grave said to be a man's there was a single iron pin on the left shoulder. In another (in which the sex was not determined) there was a bronze pin on each shoulder, and in a third one of bronze on the right shoulder and two of iron on the left. Either pinned dress was not in general use here, or the pins were perishable. There were no fibulae. Forty-one Geometric graves excavated by the Germans in the neighbourhood of Tiryns were almost destitute of metal objects.⁴ There were two certain examples (Graves 1 and 2) and one doubtful one (Grave 4) of a single bronze pin, and one (Grave 7) of a single bronze pin at the shoulder and one iron one at the level of the knees. There were no fibulae. As the single pins point to male wearers, it is possible that here women wore the Ionic chiton, but perhaps more probable that their pins were perishable. In the case of Thera there is even less to guide conjecture. Apart from nineteen fibulae in the grave excavated by Schiff, which contained a number of depositions and had been in use over a considerable period, only two were found in the entire cemetery; they formed a pair in a normal cremation grave.⁵ No straight

¹ See *Vrokastro*, Ch.-T. III (7 inhumations, no cremations) had two fibulae and nine straight pins (pp. 141 and 143-4, fig. 85); Ch.-T. IV (cremation only) had four fibulae and one straight pin (pp. 147-8, fig. 87, and pl. six c.). At this period Crete is rich in fibulae; see entries under Kavousi in Blinkenberg, *Fibulae*.

² *Vrokastro*, p. 167 (Bone-enclosure XI). Proto-Geometric tombs near Knossos (unpublished) have yielded similar results.

³ *Asine*, p. 425. 'Five' on p. 424 appears to be a slip.

⁴ *Tiryns*, I, pp. 127 ff. Grave 2 was exceptional in containing part of a spiral of gold wire and a massive bronze finger-ring. The pin had an ivory disk-head and some ivory plating.

⁵ *Thera*, II, pp. 46 and 299-300.

pins were found. Here, too, it may be that the chiton was worn; but on the whole it seems more probable that a community which maintained for some time the most primitive form of the Greek alphabet also used wooden shoulder-pins.

The graves of Rhodes are more informative. While straight pins are comparatively rare on the island, fibulae are extremely numerous, and in a series of seventh-century graves at Vroulia¹ occurred almost entirely in pairs, whence it must be presumed that they were used as shoulder-pins. The votives of Lindos included only about forty straight pins, but well over 1,500 fibulae.² Here the natural explanation is that the women of the wealthy island, where Phoenician contacts can be detected at an early date, wore over the peplos some wrap too fine to be imperilled by straight pins. The small shawl or cape worn by the female statue of Auxerre³ and also by the female figures of the doorway of the temple at Prinia⁴ suggests itself. It may have been worn in Rhodes as well as in Crete, where, it will be remembered, fibulae increase in the Geometric period.

It is a curious fact that though Rhodes has furnished what is probably the earliest example of the peplos in its most primitive form with open side and no apodygma, the wearer is neither a human being nor a deity of Hellenic type but a demon resembling a Gorgon.⁵ The dress apparently was not in high repute.

There is no occasion to follow out in detail the use of pins and fibulae in Dorian communities; the sites important to the present investigation are those in non-Dorian areas where they remained in vogue in the Geometric age, and our problem is to determine, if possible, the kind of dress with which they were associated. First comes a group of graves in Attica. Three of these were at Eleusis; two contained inhumations and the third a cremation. The first is the so-called Grave of Isis,⁶ hardly to be dated above the middle of the eighth century. The grave was a woman's; ear-rings, bracelets, and finger-rings were all in place on the skeleton. An ivory brooch and a small bronze fibula had apparently been used to secure round the head a string of beads of Egyptian faience. There were two large fibulae beside the right shoulder and four, all small, seem to have been distributed about the body; there is no record of their precise positions. A second tomb, immediately above the Grave of Isis, contained three fibulae whose position is not recorded; in the third,

¹ *Fibulae*, pp. 22 and 94 f. A Late Geometric cremation grave in the neighbourhood of Ialysos contained remains of three fibulae, one adhering to a fragment of bone (*Clara Rhodes*, viii, pp. 161 ff., fig. 150), and four pins with disk-head and single bulb. Other graves in the same region yielded pins and fibulae, mostly very fragmentary. *Ibid.* vi, pp. 126-7 and fig. 139, p. 124.

² *Lindos*, i, pp. 126 ff. A number of miniature bronze fibulae were found fastened into each other, some in pairs, others (4 examples) in small chains. *Op. cit.*, p. 84, and pls. 4-9, and nos. 92-3.

³ *Rev. Arch.*, 1908, pl. x; *KiB.*, 197, 7.

⁴ *AJA*, xxxviii (1934), pl. xviii A; *KiB.*, 197, 3 and 5.

⁵ *JHS.*, Plates, lix.

⁶ *Eph. Arch.*, 1898, p. 106. For the probable date see p. 44.

besides an amphora containing the ashes of the deceased, two fibulae were found lying on the floor.¹ In the first of the three cases Doric dress seems to be excluded; in the second and third it is possible but not proved. The pair of single-bulb pins in the alleged tomb-group of the museum of Toronto can no longer be regarded as necessarily associated with the pottery (Early Geometric), which, however, forms a coherent group, nor with the accompanying fibula, doubt having been thrown on the entire complex by R. S. Young's denunciation of the clay loom-weight as dating at earliest to the late sixth century.² Apart from this intruder, however, the group looks homogeneous. Of two Early Geometric cremation graves found by the Americans in the Agora one contained a pair of large fibulae and a pair of pins of iron.³

In the Kerameikos, as we have seen (p. 342 *supra*), pins continued and fibulae survived, becoming somewhat more numerous towards the end of the proto-Geometric period. Beyond this the publication does not go; for the succeeding stage we have only such notes as were published in the course of the excavation. Out of a considerable though unspecified number of Early Geometric graves one yielded a pair of iron single-bulb pins plated with gold and five bronze fibulae, one large one, one pair of medium, and one pair of small size. A group of similar fibulae was found near by, among the contents of some Geometric tombs whose débris had been heaped up to form the mound of a sixth-century grave.⁴ In the total absence of contemporary evidence from other regions, this is all the information concerning dress which we have from that obscure period, the Early Geometric.

In the nineteen graves of the Dipylon cemetery described long ago by Brückner and Pernice⁵ there were neither pins nor fibulae. Apart from an engraved fibula from Thorikos, an undoubted Boeotian import,⁶ the above are so far the only Geometric fibulae known with certainty to have been found on Attic soil.⁷ The provenance of Blinkenberg's small 'Attico-Boeotian' group⁸ rests only on hearsay, sometimes on no more than the statement of a dealer; and even though in two or three cases the testimony

¹ *Eph. Arch.*, l.c., pp. 103 and 114.

² *JHS.* li (1931), pp. 166-7, figs. 2-4; R. S. Young, *Hesperia*, Suppl. ii, pp. 104-5.

³ *AA.*, 1932, p. 115.

⁴ *Ibid.*, 1938, p. 97, fig. 11.

⁵ *AM.* xviii (1893), pp. 166-7. The one or two fibulae there alluded to as having occurred in other graves of the cemetery are probably the better-attested in Blinkenberg's 'Attico-Boeotian' group about to be discussed above. Of the nineteen graves all are Late Geometric and only two (I and VII) were graves of women.

⁶ Hampe, *op. cit.*, Inv. to, pl. 9.

⁷ It is true that a few fibulae and a couple of brooches are recorded as having been found on the Acropolis (de Ridder, *Cat. des Bronzes trouvés sur l'Acropole*, no. 213, which is compared to one found at Olympia (*Ol.* iv, pl. xxii, no. 368), and *Deltion* i, *Parati.*, p. 29, fig. 35, fragments insufficient to allow of dating). For the brooches see de Ridder, nos. 244-5. These, like the fibula, are more probably seventh-century than Geometric. In any case, all may well have been dedicated by Boeotian or other visitors from abroad.

⁸ *Fibulae*, pp. 170 ff., Type viii, 5 f-L.

seems fairly good, Hampe's contention that all alike (including the two pairs belonging to Lord Elgin which were unknown to Blinkenberg) are of Boeotian manufacture is doubtless sound. A gold pair of a different type¹ has no better claim to an Attic provenance and may also come from Boeotia, where the fibula seems to have been held in higher esteem than elsewhere.

Before dealing with the abundant material from Boeotia, we may note evidence for the existence of pinned and indeed 'Doric' dress in the Cyclades in the Geometric age. Of six Geometric graves excavated on Tenos² four contained nothing but the skeleton, stated in one case to be that of an adult male. No. I contained a bronze fibula and fragments of a second; bronze and amber beads from a necklace showed the occupant to be female. In no. II a pair of disk-headed single-bulb shoulder-pins was found in position. This is enough to prove the skeleton female; the two minute curved blades of iron ('lamette') which besides the pottery were the only grave-gifts are not weapons and are as likely to be the property of a woman as of a man.³

In Boeotia the fibula was a favourite ornament; the elaborate decoration of the catch-plate, whether it be the cause or the consequence, is evidence of the fact. Most of the extant specimens were found in tombs and had therefore, despite their sometimes enormous size, been in actual use.⁴ As the graves in the neighbourhood of Thebes in which most of them were found seem as a rule to have contained several interments, and as the excavations, not always conducted by archaeologists, were recorded imperfectly or not at all, the position of the fibulae in relation to the skeletons is unknown. The available evidence, such as it is, is summarized by Hampe (*op. cit.*, pp. 6 ff.). Straight pins, unless the 'Nadel' listed under no. 4, *op. cit.*, p. 7, is one, are not recorded at all.

The cemetery of Rhitsona, scientifically excavated and recorded, did not yield the engraved fibulae of Thebes. Fibulae occurred, however, possibly in pairs, in Graves 6 and 75, and in an unpublished grave (88)

¹ *Fibulae*, pp. 77-8, Type II, 23 a and b. For Lord Elgin's golden fibulae see Hampe, pl. 7.

² *Annuaire*, viii/ix, pp. 212 ff., figs. 11 and 12.

³ Cf. the small iron knives and awls from the women's pyres at Halos, *BSA*, xviii, p. 25.

⁴ This possibly does not apply to the pairs of huge crescent fibulae in London and Berlin (Hampe, pls. 1-3). Such an ornament, if worn, could only hang downwards, and the design from the spectator's point of view would be upside-down, though the wearer could study it right side up by tilting the lower edge. In fact all arched fibulae would necessarily assume this position and are so represented on Assyrian and Syro-Hittite monuments (e. pp. 353-4 *infra*, nos. 2, 3, and 4). There is, however, a unique example from Lindos of a fibula with a small quadruped standing on the inside of the bow which would be right side up when the fibula was in wear (*Lindos*, pl. vii, no. 56, and p. 85). The customary ducks perched on the outside of the bow would be upside-down. It is true that this argument against actual use must not be pressed too far, since it applies also to the catch-plate fibula. (A single exception figured Hampe, p. 30, fig. 11, comes at the very end of the series.) This class, however, often has Geometric designs only, which would have the same effect from either point of view. The grille of projecting spikes set just above the spring is another matter, for it would inconvenience any human wearer. Though temple dumps are much less frequently robbed than tombs, these fibulae look much more like votives than personal ornaments.

recorded by Hampe (p. 7; cf. *JHS.* xxx, 1910, pp. 344-6). Grave 13, a woman's, contained a single straight pin of iron.

The fact that there are several instances of pairs of fibulae from Boeotia¹ suggests that Dorian dress was worn by part at least of the population, and that not the lowest, since at least two pairs of Boeotian type (Lord Elgin's) are of gold. We have no evidence earlier than the eighth century, for no Geometric graves which can be ascribed to the ninth have so far been found in Boeotia. A pair of Boeotian fibulae with engraved catch-plate was found together with two spectacle fibulae in a Geometric tomb at Delphi,² and others have occurred as far afield as Olympia, Rhodes, and Crete.³ Except for the single example from Thorikos, however, none has been found in the territory of Boeotia's next-door neighbour; so far as our evidence goes, pinned dress had disappeared from Attica by the middle of the eighth century. If this be so, it is probable that it had been superseded by the linen chiton; otherwise we must suppose an interim in which the pre-Dorian dress revived. There seems, however, to be no reason why Attica, whose Late Geometric vases are covered with representations of ships, should not have imported the chiton at a date when Oriental features in ornament and design had already appeared in her art, and relations, almost certainly direct, between Athens and Cyprus had been established. Herodotus indeed implies that Attica derived the dress from Ionia, which in turn had taken it from Caria. The Ionic women's chiton, however, is simply the long linen chiton worn all over the Near East by men and women alike, and though Herodotus may have been right as to how Ionia got it, it may well be that Attica took it independently from farther east. We know nothing of the dress of the Greek colonists of Ionia until we encounter representations of it in art, and of these none can be dated with certainty above 600. No proto-Geometric site but Assarlik is at present known on the Anatolian side.⁴ The Geometric material from Miletus is still unpublished. No Geometric graves have been excavated except at Colophon, and though the lost material from them had been recorded, the information it yields is meagre.⁵ The rite was cremation, and the heat generated by the pyres had been so intense that many of the bronze objects were reduced to pieces of formless slag. It was indeed possible to identify the types of a number of fibulae, most of which belonged to that named by Blinkenberg III, 10 (Fig. 49 A), a type frequent in the Geometric 'bone-enclosures' of Vrokaastro, though absent from the proto-Geometric chamber-tombs on the same site.⁶ There were no straight pins. This at least proves

¹ Hampe, *Inv.*, nos. 44/5, 88 (pl. 7 = the two Elgin pairs), 89/90 and 91/2.

² *Feuilles de Delphes*, v, p. 112 and figs. 406 and 406 a and b.

³ See Hampe's Inventory.
⁴ Half a dozen sherds of somewhat doubtful proto-Geometric ware have been reported from Chios (*JHS.* lix (1939), p. 203), and others from the German excavations at the Heraion of Samos and at Miletus. For the last see *Bericht über den sechsten internationalen Kongress für Archäologie*, p. 327.

⁵ I owe the information which follows to the kindness of the excavator, Miss Goldman.

⁶ See *Vrokaastro*, p. 136, pl. xx A.

that whether or no the colonists carried the peplos with them from the mainland, they did not secure it with unprotected shoulder-pins.

The last site in mainland Greece which need concern us is Halos in Achaia Phthiotis.¹ Here a tumulus covered the remains of sixteen pyres on which the dead and their grave-goods had been burned; a number of fibulae was found, but naturally there was no evidence of the manner of their use. They were found almost exclusively on the women's pyres in numbers varying from one to seven, but in practically every case fragments of extra specimens are mentioned. As at Colophon, no straight pins are recorded. A single fibula was found on one of the men's pyres (XV) and one immediately outside another (XVI); in view of the evidence from the Kerameikos and del Fusco cemeteries that men sometimes wore a single fibula, there is no need to suppose that these two are out of place. No conclusion can be based on the fact that neither pin nor fibula occurred in the group of eleven slightly earlier tombs found on the same site, for only one of them contained adult remains and the two skeletons in it were not accompanied by objects of any kind. The pyres are dated to the eighth century by the pottery found on them.²

Pins and fibulae from sanctuaries for the most part contribute little to the solution of our problem, for they neither show the manner of wear nor, as a rule, determine the sex of the dedicator.³ Further, unless the sanctuary has a merely local importance, it is impossible to say without other evidence what proportion of the votives, if any, is of local manufacture. Even so, however, points of interest emerge. The fact that fibulae were found in remarkably large quantities in the precinct of Zeus Thaulios at Pherai and also occurred in that of Apollo Ismenios at Thebes suggests that in these regions men wore and dedicated fibulae; but it does not follow that all the fibulae of the Argive Heraion or the shrines of Artemis Orthia and Athana Lindia were dedicated by women or that Dorian men never wore them.

The pins and fibulae of the archaic temple of Artemis at Ephesus have a special interest because a representative collection in gold, silver, and electrum was buried within the Basis (presumably, as the excavator supposed, that of the earliest cult-image of the goddess) showing not only what was in wear at the date of the foundation but containing, as such deposits of valuables normally do, objects of earlier date which carry the record back in diminishing volume possibly as much as fifty years. The far more numerous bronze examples, found outside the Basis, exhibit the same types, probably those of the date of foundation.

The date of the Basis, which means that of the latest articles deposited in it, was put by the excavator, D. G. Hogarth, c. 700, but this is certainly

¹ *BSA*, xviii, pp. 1 ff.

² *Ibid.*, p. 3 f.

³ The pins associated with peploi in an inscription found at the Argive Heraion (*IG*, iv, 1568) may be safely assumed to have been shoulder-pins dedicated by women, but their case is exceptional.

too high, and the chronology is at present under review. Löwy's contention¹ that all the structures uncovered by Hogarth were part of the foundations of the Croesus temple built c. 550 was easily and conclusively disposed of by Gjerstad,² who established the correctness of the sequence of buildings as stated by Hogarth and paid full tribute to his skill as an excavator and to the meticulous exactness of his record of the finds. Gjerstad's own date of c. 650 for the Basis is now, however, regarded as too high, inasmuch as most of the articles included in the treasure date according to the chronology at present current to the last quarter of the seventh century. Some, as has been said, are earlier, being no doubt jewellery prized by the family which had owned it for perhaps two generations. There is a fibula in it of Blinkenberg's III, 11 type, which is also found in Geometric contexts at Vrokastro (Fig. 49 B *supra*) and Epáno Zakro, both in Crete.³ None of these small and delicate articles can ever have served to secure the heavy woollen peplos.

Stratigraphical evidence, lacking at Ephesus, is forthcoming from the Orthia site at Sparta and in a much less complete form from the sanctuary of Athana Lindia.⁴ At the former both fibulae and pins had gone out by the end of the seventh century; none is ascribed to the sixth, and it is expressly stated (*AO.*, p. 200) that 'of plain fibulae' (i.e. fibulae without plaques) 'after the early years of the 7th century there are very few'. One or two simple types of the bow fibula survived rather longer, but in the main pin and fibula were superseded, as we shall see, by a new type of fastening. At Lindos the pin disappears early and the fibula does not survive the seventh century.

At Perachora numerous pins and a very few fibulae were found in the Geometric temple of Hera Akraia, which dates to c. 800, and both in very large quantities in the temenos of Hera Limenia, where the series begins in the middle of the eighth century; the very large majority was found in the lowest strata, in conjunction with proto-Corinthian pottery.⁵ There was no evidence that any were later than the seventh century, though owing to the thinness or the disturbance of the upper archaic strata there is no actual proof that none existed in the sixth. On Samos three small fibulae were found in a young girl's grave which belonged to the second half of the sixth century.⁶ Thiersch, who seems to have missed this quite exceptional instance, quotes no sixth-century example of a pin or fibula *in corpore* and rightly concludes that the latter had, generally speaking, ceased to exist; to prove the continued existence of the former he relies on

¹ *Die Chronologie der frühgriechischen Kunst*, Ak. der Wissenschaften in Wien, Sitzb. II-III, 4, 1932.

² *LAA.*, xxiv, 1937, pp. 15 ff.

³ *Exc. at Eph.*, pl. xvii, 3; *Vrokastro*, pl. xx B, p. 156; *BSA.*, vii, p. 148.

⁴ *Lindos*, I, p. 75.

⁵ *Perachora*, I, pp. 70-3 and 168 ff. A silver fibula from the Akraia is undoubtedly an import from east Greece; it has a counterpart in the Ephesus treasure (*Exc. Eph.*, pl. xi, 22).

⁶ *Aus ionischen und italischen Nekropolen*, p. 42, pl. xv, nos. 70-72.

the mythological figures of the François vase. In Argos and Aegina, however, as Herodotus implies, pins were still in use in the fifth century, and a pair of shoulder-pins has been found in a woman's grave of the sixth century recently excavated on Aegina.¹ It may be from these regions that pins found at Trebenishite near Lake Ochrida were derived; they were found in both men's and women's graves of the seventh and sixth centuries and were unmistakably Greek. Two fibulae from the same cemetery were Illyrian in type.²

The virtual disappearance of fibula and metal dress-pin from the greater part of the Greek world by the end of the seventh century is an established fact; the survival of both in its peripheral regions even in Hellenistic times does not concern us here; it is briefly discussed in a note at the end of the chapter.

The fact that they are not succeeded by new types at sanctuaries previously prolific such as those of Zeus Thaulios, Olympia, and the Argive Heraion indicates and indeed may be said to prove that both articles virtually ceased to be produced.³ This does not of course mean that the Greeks abandoned methods of fastening so simple and convenient; the mere fact that the Doric women's dress persists is evidence to the contrary. That the poorer classes used, as they doubtless always had, skewers of wood or bone in place of metal pins is highly probable. There is adequate evidence that the well-to-do replaced both pin and fibula by the brooch. The fibula had one serious drawback; in the end the pin was bound to break and could be replaced only by a pin working on a pivot or a hinge, which converted the fibula into a brooch. It was more reasonable to start by making a brooch. Moreover, even the cheapest form of fibula was necessarily of metal throughout and was therefore more costly than a bone plaque or disk with no more metal than was required for a pin and staple or at most a simple safety-pin attached to the back of the plaque. To content the rich an ivory plaque would afford a field for fine artistic work such as adorns the best examples from Sparta. From the outset the brooch tended to be of relatively perishable materials—ivory, bone, and in all probability carved wood—hence it has been preserved only when found on sites scientifically excavated. Even if plated with gold or silver, as was certainly sometimes the case,⁴ it would have small chance of reaching a museum if found in other circumstances. Brooches of known types

¹ *AA.*, 1938, p. 496.

² Filow, *Die archaische Nekropole von Trebenishite*, pp. 31-3, fig. 29; Vulić, *Oest. Jahresh.* xxvii (1932), pp. 1 ff.; see esp. p. 17, fig. 25. The type of pin occurs at both Sparta and Perachora; see *AO.*, p. 200; *Perachora*, I, p. 172. It is possible that Argos or some other Peloponnesian city maintained a conservative line for trade with foreigners.

³ For women's dress at Argos and in Aegina see Herod. v, 88, and for further discussion the Appendix to this chapter. It must always be borne in mind that the treasures of the pan-Hellenic sanctuaries bear witness rather to contemporary fashion in the Greek world as a whole than to local conditions.

⁴ *Fibules*, p. 267, nos. 4 a, b, and c.

made of, or covered with, metal, are depicted on two black-figured vases by Lydus,¹ a painter whose activity begins well before 550, and on a vase in Berlin (Pl. XXIX, 2).²

Plaque brooches of bone and ivory were found on the Orthia site chiefly in association with Geometric, sub-Geometric, and proto-Corinthian pottery. In the second half of the seventh century they diminish; only two were found with Lac. III and Lac. IV pottery, i.e. in sixth-century contexts.³ The plaques or shields were of two types—rectangular and double-disk or 'spectacle'. Strictly speaking, they are in a sense rather fibulae than brooches, since the metallic part consists of a single piece bent on itself in the form of a safety-pin; since, however, the specimen figured as typical⁴ has no spring, the point is a nice one. The plaques are at all events of brooch type, since the spectacle class occurs with hinged pins at Ephesus (where the displayed hawks of the Basis in electrum and silver also have hinged pins); at Lindos, however, seventeen specimens of the spectacle type in ivory appear to have been attached to safety-pin fibulae. The decoration of the 'spectacles', punched 'bull's eye', or concentric circles distributed round the rim or in the field (more rarely a guilloché round the rim) was identical at all three sites, and it was noted at Sparta that difference in size, material, and ornament had no chronological significance.⁵ Spectacle brooches, though found at Lindos and Ephesus, do not occur farther east, nor do the rectangular and hawk types. In other east Greek regions also fibula gives way to brooch, but the form of the bow fibula is retained and only the spring-pin exchanged for an inserted pin.⁶ Possibly this type is a shade earlier than the spectacle brooch, for many examples were found in the temenos of Hera Limenia at Perachora in Late Geometric and archaic strata which yielded only one fibula of the same type.⁷

The proportion of pins to fibulae at Ephesus is in marked contrast with that observed at Lindos. To give exact figures is impossible, owing to the fragmentary state of many of the articles. Roughly speaking, however, there were nearly two dozen fibulae including a few simulacra in the precious metals and nearly 100 of bronze, besides six brooches of the displayed hawk type and, probably, the pins of two others and twenty ivory brooch plates, mostly of the spectacle variety. Straight pins were more difficult to reckon, since heads and shanks were often found apart

¹ Graef, *Vasen von der Akropolis*, i, p. 35; *MuZ.*, 238; Hoppin, *Black-figured Vases*, pp. 160-3; Gerhard, *AF.*, pls. 122-3; *M.A.I.*, iii, pl. 24; Hoppin, *op. cit.*, pp. 156-7. A third example is furnished by a vase of the potter Kolchos who also worked with Lydus; Rumpf, *Sakontides*, pl. 31 (right-hand figure in lowest register). Cf. *Fibulae*, p. 33 (where the second Lydus vase is attributed to Kolchos the potter), and fig. 3, p. 28.

² Furtwängler, *Beschr.* 1732.

³ *AO.*, pp. 196 and 200, 224-5, and 224-5. These appear to include the earliest examples of the brooch at present known.

⁴ *Ibid.*, pl. xcii, 2.

⁵ *Ibid.*, p. 225.

⁶ As the method of attachment (pivot or hinge) varies and cannot always be determined, the term 'inserted' is used to cover both cases.

⁷ *Perachora*, i, p. 171.

and shanks were sometimes broken into several fragments; but on the lowest estimate there were over 200 in the precious metals, 50 bronze, and approximately 150 with bronze shanks and ivory heads. As Hogarth pointed out, it is certain that the jewellery of the Basis at least must be of local manufacture, since foreigners would not be likely to participate in a foundation deposit. We have found this to include all the fibula types found at Ephesus and a number of straight pins in precious metal, as well as one type of ivory-headed pin, which belongs to a numerous category, though only a few were found within the Basis. Its head is unique and possibly represents the mystic cista.¹

All these types therefore are related to the local dress. Very little of the jewellery can be plausibly connected with the peplos; the small and delicate fibulae of the Basis are quite unsuited to be the shoulder-fastenings of a heavy woollen garment, and the same is true of the pins, which are far smaller than the examples from graves which have been proved to be shoulder-pins. Some, though by no means all, of the bronze fibulae from outside the Basis are large and strong enough for this purpose,² and the peplos may still have been worn to some extent, especially by the poorer classes; but this does not apply to the ivory-headed pins, whose slender shanks contrast sharply with the massive quality of typical examples, metallic throughout, from Sparta and the Argive Heraion. Though the lowering of the Ephesus dating has diminished the interest of the Basis treasure for students of Homeric dress, it is not without value; it shows that by the middle of the seventh century, if not earlier, the peplos was at least in process of disappearing from an important Ionian city and that none the less pins and fibulae continued in common use. One of the earliest illustrations of the Ionic chiton extant is furnished by a bronze figurine from Ephesus, dating to about 600 B.C. (*v. infra*, Pl. XXIX, 1).

The fibulae are, as might be expected, all of Anatolian, i.e. east Greek types, having semicircular bows, ribbed or beaded.³ On some the ribbing is interrupted by raised bands; on others these replace the ribbing altogether. These types, of which a fair number has been found on the Greek mainland, occur with slight modifications of form as far east as Nineveh, and on various north Syrian sites—Carchemish, Sinjerli, Deve Hüyük—and also figure on three monuments ascribed to the eighth or seventh century. The first occurs on an Assyrian relief,⁴ where it secures a short-sleeved coat worn over a long tunic by a man carrying a wine-skin on his shoulders. The edges of the coat do not meet and are held together by an enormous

¹ *Exc. at Ephesus*, pl. xxxiv, 2-9. The type was also found in gold; see pp. 99-100 and pl. v, 39.

² They should, however, be compared with the indisputable shoulder-fibulae of Vroulia, which measure 10, 12, and even 15 cm. The normal measurement of the larger specimens from Ephesus is 6 or 7 cm. Incidentally, if Löwy's date were correct, none of the Ephesus pins or fibulae could have anything to do with the peplos, for the chiton which superseded it occurs on monuments as early as 600.

³ *Fibulae*, pp. 204 ff.

⁴ Botta, *Mon. de Ninive*, ii, pl. 106 bis, figure on the left.

fibula with plain semicircular bow and raised bands. The other two monuments are Late Hittite reliefs in a more or less Assyrianizing style. The first is the well-known rock-carving of Ivriz on which a king appears before the god of vegetation; his mantle is secured by a semicircular brooch.¹ The other is a grave stele from Sinjerli on which is portrayed a deceased queen,² seated before a table of good things (Pl. XXIX, 3); she wears a long tunic with short, close-fitting sleeves fastened on the breast by a ribbed semicircular fibula. It appears to be on the side nearest to the spectator, but probably, according to a common convention, it is to be thought of as in the centre.

The fibula, whatever the precise region in which it originated, is a European invention and can hardly have been transmitted to Nineveh by any but Greek hands. Whether the Hittite queen's mode of wearing it was initiated by Greeks or Hittites it is impossible to say; influences could pass in either direction via the mouth of the Orontes, where, as already noted, we have traces of the Greeks trading, perhaps established in a post, before the end of the eighth century.³ The queen's dress is that which was adopted by a large part of the Greek world and came to be known as the Ionic chiton; that in the Near East from which the Greeks ultimately, perhaps in some cases directly, derived it, it had sometimes a slit in front closed by the Greek fibula is a fact of great interest.

In structure the earliest form of Ionic chiton is only one degree less simple than the Dorian peplos, being a sack instead of a blanket. The side which the Dorian blanket in its simplest form left open is sewn up, and also one of the ends, in which, however, a central opening is left for the head, while arm-holes are reserved at the extreme top of the side-seams. If the dress is wide enough at the bottom to allow the wearer any freedom of movement, there will be a good deal of slack above. This is gathered in by a girdle at the waist, but hangs cape-fashion over the shoulders, covering the upper arm wholly or partly. The early bronze figurine from Ephesus just cited,⁴ at latest of the early sixth century, admirably illustrates this type. This gives us a sewed, but not a shaped, dress, since the original widths are there in their integrity. If the fabric of such a dress were fairly

¹ *Archäologische Zeitung*, 1885, pl. xiii; P. et C. iv, p. 725, fig. 354; Contenau, *Manuel*, iii, p. 1127, fig. 743. Körte (*Gordien*, p. 97, n. 35) points out that the article, at first sight a fibula, proves on inspection to be a brooch since the two ends of the bow are united by a cross-bar behind which the pin must be supposed to work on a hinge or pivot. Three examples of the type, two from Olympia and one from a site in the Troad, are listed in *Fibules*, p. 217; cf. fig. 3, 2, p. 28.

² *Ausgrabungen in Sendschirli*, pl. liv; Contenau, *op. cit.*, p. 1146, fig. 757. These ribbed types find parallels in *corpore* at Nineveh and they and the north Syrian specimens find closer analogies at Ephesus than elsewhere; compare *Fibules*, p. 237, figs. 272 and 273 with p. 210, figs. 230, 231, and 232.

³ See pp. 73-4 *supra*.

⁴ *Ephesus*, pl. xiv; Lamb, *G. and R. Bronzes*, pl. xxii c. Treated in this way the Ionic chiton forms over the bosom marked triangular folds like those of the Doric peplos. Cf. a supporting figure of Naxian marble from Athens, Payne, *Archaic Marble Sculpture*, pl. xxi, 2, no. 592 and p. 12.

coarse, it could probably be woven of such a breadth that two widths would suffice. If it were fine, more would certainly be necessary, and to keep the position of the seams symmetrical an even number, presumably four, would be taken. The dress in this exceedingly simple form is well illustrated by the ivory figurine of the priestess from Ephesus,¹ which shows how sophisticated an air can be given to it (Pl. XXX, 2). The vertical ridge which forms a median line down the breast doubtless marks the position of a seam, but unless it has some further significance, it is difficult to see why it should be indicated. It may be intended to mark such an opening in the dress as we know that of the Hittite queen to have possessed. The figurine was found completely isolated and can be dated only by its style; Kunze attributes it to the first half of the sixth century.² The dress of an ivory figurine³ with a spindle (Pl. XXVIII, 3) ascribed by Kunze (l.c.) to the seventh century is also a chiton, but it is said to have sleeves to the wrist, a point which cannot be verified in the reproduction. Such sleeves would necessarily be cut out of a separate piece and sewed in, a development which would probably not be reached for some time. Among the earliest monumental evidence for the Ionic chiton in the east Greek region is a Cycladic statue which is to be dated at latest to c. 600.⁴ If, however, we accept as evidence the apparent vanishing of pins and fibulae from Athens, then we must date its first appearance on the mainland somewhere in the eighth century, after direct relations between Athens and Cyprus had begun. The earliest extant illustration of the Ionic chiton from the mainland is probably that furnished by a terra-cotta dated to the second quarter of the seventh century which was found in the temenos of Hera Limenia at Perachora (Pl. XXX, 1).⁵ That this antedates the examples from Ephesus and the Cyclades just cited is probably mere accident. While there is no reason to think that Ephesus was earlier than the mainland in establishing Oriental contacts, neither is there any to suppose that she lagged behind; we can only hope that some future exploration of an Ionian Geometric cemetery not purely crematory may enable us to establish the chronology. When representational evidence, tardy and scant, is available, according to the ordinary practice of Greek art at all periods it leaves us in the dark about essential points in the structure of the dress, viz. its openings and fastenings; we have only probability to guide our conjectures. It is of course quite possible to pull over the head a long dress with a hole at the top left for the purpose and with arm-holes at the sides, but it is an awkward manoeuvre and pulling it off again is rather worse. If the head-hole is

¹ *Ephesus*, pls. xxi-xxii. The dress of the priestess would certainly require four widths and it is unlikely that more would be used. The vertical band on the skirt appears to be the decorated border of the width whose other edge is indicated by the central ridge. If the dress were ungirt, the border would hang down the priestess's r. side; as it is, it has been pulled forward by the massing of the central folds.

² *KBR.*, p. 253.

³ *Oest. Jahresh.*, xii (1909), p. 250, fig. 126.

⁴ *Perachora*, i, pl. 87, 14 a and b, p. 199.

⁵ *Exc. at Eph.*, pl. xxiv, 1 a and b.

enlarged sufficiently to ease matters, very slight movement will be enough to make the dress slip down over one shoulder or the other. Our early monuments, such as they are, suggest a head-hole of minimum size. That the dress had openings and (probably) fastenings which are not reproduced becomes a certainty when we reflect that if it actually was as represented, no woman could suckle her baby without completely undressing, an improbable state of affairs in any society not sufficiently sophisticated to delegate maternal duties.¹ Presumably therefore the dress was made to open, and this can only have been in one or other of two places: along the shoulders by enlarging the head-hole or omitting the top seam altogether, or else down the front by cutting a slit. The first method is frequently illustrated in sixth-century sculpture and in the later black-figure vase-painting. By this time buttons have come in and are used to replace the top seam, closing the dress on each side from the neck to the side-seam. The method can hardly have been originally associated with the chiton, since it never appears on the long tunic of the Near East which is the model of the Ionic chiton and about which we have abundant monumental evidence from the first half of the ninth century onwards. That it is not indicated on our early Greek monuments cannot count for much, such indications being at all times the rare exception to the rule; but it is unlikely that it was adopted until the use of buttons made it easy, and there is nothing to suggest that buttons came in until the fibula had virtually gone out. As we see it on our monuments, the method is elaborate, suited to a dress both fine and voluminous where there is much pliable material to be gracefully disposed of. The stuff was carefully pleated at a number of points, back and front, selected symmetrically and running from the neck to the side-seam and then sewn into a pair of bands; back and front bands were joined by buttons and loops. This arrangement can be plainly seen on a kore from the Acropolis,² and may be presumed in many cases where the small gathered pleats are shown but the buttons are omitted.³ The men's chiton is occasionally

¹ It is true that on an Assyrian relief (Layard, *Mon. of Nin.* i, pl. 67 A) there is a representation of a female captive, a Hebrew from Lachish, suckling her child, which might be supposed to settle the question; the artist, however, was unequal to the situation, and the operation is to all appearance being performed through the dress. The woman's arms and shoulders, both right and left, certainly present a very nude appearance, but that is merely because the sculptor is not accustomed to distinguish dress from the forms beneath it except by pattern. Pinza (*Hermes*, 1909, p. 537) thought that like the buttoned Ionic chiton presently to be described, this Semitic garment had no top seam and imagined it to be closed along the shoulders by a row of fibulae removable when occasion required. There is no evidence whatever for the existence of such a dress in the Near East, and in view of the paucity of fibulae in Assyria, north Syria, and Palestine the theory is highly improbable. Though Pinza supposes only one arm and shoulder to be bare, the two present exactly the same appearance. In view of the Sinjerli queen's dress, an opening down the front seems a more probable solution.

² Payne, *Archaic Sculpture from the Acropolis*, pl. 40, no. 682. The buttons are apt to fare badly in reproductions, but can also be detected on no. 670 (pl. 65, 2).

³ *Ibid.*, pl. 19, 1, no. 677, *JHS.* l (1939), p. 323, fig. 7.

fastened on the shoulders in the same way.¹ As has been said, the method is not associated with the chiton in its original home; it is possible that it arose as a result of contact with the peplos. It used to be supposed that the buttons were minute brooches, and Pinza has suggested (*loc. cit.*, p. 356, n. 1 *supra*) that in archaic Greece fibulae were used for this purpose. Here we are met by a total lack of evidence.² All that can be said is that apart from the absence of a monumental testimony which was hardly to be expected, there is nothing which even remotely suggests such a use in the graves of the Kerameikos or of Syracuse, though in the latter we have seen reason sometimes to suspect the presence of the Ionic chiton.

The second method of enlarging the head-opening remains to be considered. The costume of the lady of Sinjerli suggests that in the Near East this was done by making in front a vertical opening which could be closed by a fibula. There is no direct archaeological evidence that this plan was ever followed in Greece, though, as has been shown above, the disposition of fibulae in some of the graves at Syracuse is consistent with it. Bands of embroidery, however, are in use in most ages and places to decorate the edges of openings, and the Ionic chiton is sometimes represented with such a band, vertical and running in some cases the whole length of the dress in front,³ in others, more significantly, stopping short at the waist.⁴ We may conjecture that along it ran a slit which the embroidery would serve to mask and which might be closed by a fibula. On a series of Clazomenian vases⁵ such slits seem to be indicated by incised lines running from neck to waist of the Ionic chitons worn by rows of dancing women (Fig. 50). They do not form a decorative design, and no incision occurs on any other part of the dress. Though the use of incision on Clazomenian vases is capricious, it is difficult to see why these lines should be thus emphasized unless they have some structural significance. Finally, there is the position of certain small



FIG. 50

¹ See, e.g., Langlotz, *Frühgriechische Bildhauerschulen*, pl. 2.

² The statement in Aelian (*V.H.* i. 16) that in ancient days women did not sew their chitons together at the shoulders, but secured them with rows of *peplos* of silver or gold is interesting, but can hardly be based on any special information about archaic Greek dress. It may possibly reflect some comment of Alexandrian scholarship on *σ 292*. The Alexandrians had at their disposal in reconstructing early Greek dress the sculpture of the classic age and a good deal of the archaic. They would be familiar with the buttoned sleeve of the Ionic chiton, and this might suggest to them a means of utilizing the twelve *peplos* offered to Penelope with a peplos. For the possibility of studs as an alternative to buttons, see p. 339, n. 2 *supra*.

³ e.g. on the Harpies' chitons on the Pinneus vase, *Gr. Vm.*, pl. 41.

⁴ *Lindos*, i, pl. 82, p. 465; *MuZ.*, Medusa and a sister in the unnamed figure on p. 20.

⁵ *Tanis*, ii, pl. 29; Watzinger, *Kat. der Vasen in Tübingen*, pl. ii, c, 5.

fibulae in some of the women's graves at Syracuse already referred to as suggesting a short vertical slit below the neck.¹ The small fibulae of Ephesus may have been used in the same way. The use of the straight pins from this site cannot be determined; they seem hardly more adequate for the himation, supposing it to have required them, than for the peplos. Presumably they served to fasten shawls or veils.

The evidence therefore of pins and fibulae from the east side of the Aegaeon supports the use of the peplos in the Geometric and early archaic period in Rhodes and possibly at Colophon, and is adverse to it at Ephesus in the seventh century. Further, we have here a plain indication that the use of pins and fibulae was not confined to the peplos; mention of them therefore in Homer or elsewhere does not by itself imply the wearing of it.

2. THE EARLY HISTORY OF GREEK DRESS

Having cleared the ground for the discussion of the dress of women in Homer, we may turn to the history of dress in Greek lands from the Bronze Age onwards. We are at once struck by a remarkable continuity in that of male costume. The chiton throughout is very short. The typical short tunic of the East reaches normally to the knee, sometimes a little below it, and never stops far short of it, as may be seen alike on the reliefs of Medinet Habu and those of Khorsabad and Nimrud. The Greek chiton in the frescoes of Tiryns, on the vases and sherds of Mycenae, on a Geometric terra-cotta figurine from the Agora at Athens,² and on the innumerable monuments of the seventh, sixth, and fifth centuries normally stops at mid-thigh. Longer examples are of course known, and are presumably due to a renewed acquaintance with Oriental models. The engraved corslet from Olympia³ on which a lyre-player and a bearded figure appear in chitons well below the knee is Cretan, and therefore the more likely to have been produced under such influence. On the Melian Herakles amphora⁴ the bearded man behind the chariot wears one even longer, and on another amphora of the group⁵ a man appears in the *ποδήρης χιτῶν*,⁶ perhaps as early an instance of this Oriental import as any extant (Pl. XXXI, 1).

The story of women's dress is very different. We meet it first in a form which can only have been borrowed from Crete and therefore cannot go back beyond the sixteenth century, when the intimate relations which such imitation presupposes first become traceable. The existence of a simpler and more widely worn costume seems fairly well established from the beginning of LH III onwards, but not its nature, origin, or age. All that can be said is that until pins make their appearance in the graves of the Kerameikos, women's dress must have been shaped and sewed to an extent which made pins unnecessary. At no stage is any foreign influence

¹ See above, p. 342, and note especially Graves CCV, CCCCXII, CCCCXXXVI, and CCCCXLI.

² *Hesp.*, Supp. II, p. 66, 42.

³ *MuZ.* 135.

⁴ *Eph. Arch.*, 1894, pls. 12 and 13.

⁵ *JHS.* xxii (1902), pl. vi. 1.

⁶ Cf. *τερυμύετρα χιτῶνα*, = 247.

traceable other than that of Crete, and, mysterious as are most of the epic names of female garments, none of them is thought to be Semitic. No woman in Homer wears a chiton. From the close of the Bronze Age until the seventh century is well started we have only the evidence of the pins and fibulae, proto-Geometric and Geometric, from Athens or elsewhere, which on the whole bears out the statement of Herodotus that at one time 'Dorian' dress was worn over much of non-Dorian Greece and notably in Attica. The all but total disappearance of pins from the Geometric graves of the Kerameikos shows that in Attica at least a shaped and sewed dress was once more in the ascendant. Geometric vase-painting, though it exhibits some variety in its treatment of dress, does not give us any means of distinguishing between peplos and chiton; there does not seem, however, to be any instance of a himation earlier than the period of transition to the proto-Attic style. A Geometric figurine of a mourning woman from the Athenian Agora¹ is inconclusive because it is impossible to say how far it is realistic; the figure of another mourning woman painted on her breast can hardly represent an actual pattern. Sleeves are certainly represented, and there appears to be an over-dress similar to that identified by Thiersch with the *ependytes*. Long sleeves would agree with the somewhat later ivory figurine of a woman with a spindle from Ephesus (*v. supra*, p. 355). The Late Geometric 'Grave of Isis' suggests that in this period the Saronic Gulf had felt the influence of foreign fashions in dress as well as in religion. It is therefore possible for the women's chiton to have found its way to these regions by the middle of the eighth century and very possibly earlier, and once the mode was introduced, there would be no need for a continuous importation of chitons, since Greek women could produce them in native linen.

The Ionic chiton of a female terra-cotta figurine dated to the second quarter of the seventh century from the *temenos* of Hera Limenia at Perachora² has already been noted as earlier than any datable example from Ionia.³ The evidence of Colophon is negative; it must, however, be borne in mind that neither here nor at Rhodes is the wearing of the chiton under the peplos excluded. Some of the dresses worn by female figures on Melian amphorae seem definitely to be chitons. The mythological figures indeed tend to wear the traditional peplos with its woven pattern covering the whole field; thus both the bride of Herakles on the body of the Herakles amphora and the interlocutrix of Hermes on the neck-panel⁴ have dresses with a pattern of quartered squares which can only be in-woven in a contrasting colour; and this implies that the fabric was of wool. The woman, however, of an almost identical but apparently human pair on the

¹ *Hesperia*, Supp. II, pp. 53-4, fig. 36.

² Pl. XXX, 1.

³ Cf. Payne, *Archaic Sculpture from the Acropolis*, p. 16. Payne is occupied here with the date of the himation worn diagonally, but notes in passing the extreme rarity of the peplos in early Ionian art.

⁴ *Eph. Arch.*, 1894, pls. 13 and 14.

neck-panel of another amphora just cited¹ wears a dress covered with fine cross-hatching in grey which cannot be regarded as a pattern, and the man wears the *ποδήρης χιτῶν* with fine vertical folds also indicated in grey. It is improbable that women were behind men in adopting the imported dress. There is no indication that the dress of this figure is anything else; and if this interpretation is correct, the chiton is also worn by the foremost of Apollo's two companions on the Apollo and Artemis amphora (Pl. XXXI, 2) and by the female figure to the right on yet a third.² It is difficult to believe that it was not common in Ionia and the islands in the seventh century, and the mere fact that the peplos continues to figure in vase-painting has no necessary bearing on the costume of everyday life.

We may now turn to a review of the meagre archaeological material available for the investigation of Greek dress from the beginning of the Late Bronze Age to the date at which vase-painting and other arts begin to supply reasonably satisfactory evidence.

Of Minoan costume—a loin-cloth supported by a belt in the case of the men and in that of the women a bell-skirt and a short jacket which left the breasts exposed—there appears to be no trace in the poems, unless possibly the allusion in *I* 397 to the *στίβειά ἱερόειρα* of Aphrodite perpetuates the memory of the Great Goddess of Crete. For the sake of completeness however, as well as of a single monument of great significance, we may begin with the Shaft-graves of Mycenae,³ though according to their evidence Minoan dress prevailed at that date on the mainland. The stelai give us no information; the local artists were unequal to the problem of representing dress, and the lords of Mycenae and their opponents alike are to all appearance nude. This is unfortunate; for the native art might have supplied a check on the evidence of the other monuments, which so far as male dress is concerned are the Minoan works of art—engraved rings and seals, Lion-hunt dagger-blade, &c.—already discussed in the chapter on weapons and armour. The arguments there adduced to show that they indicate the actual use, however restricted, of Minoan armature on the mainland apply no less to the costume; there are, however, indications, both negative and positive, that another type of dress was also in use. Karo has pointed out a curious fact,⁴ viz. that though the projecting and sharply profiled edge of the belt which supports the loin-cloth strongly suggests that it is of metal, no single example of it was found in the furniture of the Shaft-graves. The natural inference is that the costume, undoubtedly exotic, was not universally nor even perhaps commonly worn; its use may have been confined to young bloods engaged in sport or war. Positive evidence of the existence of a different type of dress is afforded by the Siege vase (Fig. 4, p. 142). The helmsman who brings

¹ *P.* 357 *supra* and Pl. XXXI, 1.

² Conze, *Melische Thongefässe*, pls. i and iii.

³ A summary of the scanty data they afford is given by Karo in the final chapter of *Die Schachtelgräber von Mykenai*, pp. 173 ff.

⁴ *Ibid.*, p. 175.

the attacking ship to the shore wears a close-fitting, short-sleeved, beltless chiton, together with the boars' tusk helmet characteristic of Bronze Age Greece. That a tunic was in general wear is probable, if only for climatic reasons.¹ When it is remembered that the MH civilization persisted down to the opening of LH III at Eutresis, Asine, Tiryns, Malthi, and probably all but a few sites such as Mycenae, Kakovatos, and Vapheio which for some reason fell under Minoan influence, and moreover that there is a recrudescence of MH traits even at Mycenae in LH III, it appears not improbable that we have here the normal male garment of Greece from the beginning of the MH period onwards, if not earlier; of EH costume we know nothing whatever. At any rate, from LH III onwards we have a series of monuments testifying to the general use of the tunic on the mainland. They are as follows:

1. Fragments of fresco from approach to megaron at Mycenae, on which warriors and grooms preparing for battle are depicted (Pl. XXVII, 1) (*BSA.* xxv, pl. xxvii). The upper parts only of the two figures reproduced are original; the lower, including the skirt of the tunic and the leggings, are restored from the megaron fresco; v. *infra*.
2. The fresco from the megaron; attack on a town (Pl. XII, 3).
3. The Warrior vase, Warrior stele, and various LH III sherds (Pls. III, 1 a and b, II, 2 and 3, XII, 1), all from Mycenae. The Warrior vase, Warrior stele, and one of the sherds show fringed chitons, an Oriental trait; on the third the lower edge is plain.
4. The fragments of fresco from Tiryns (*Tiryns*, ii, pls. i and xi, 4 and 5). Like the figure in the Mycenae fresco, they show a fringeless chiton. It has short, tight sleeves, decorated borders, and a narrow girdle, certainly not of metal (fig. 51).

The figures on the sherds from Tiryns are so barbarous in execution that their clothing cannot be interpreted in detail, but there can be no doubt that it includes a chiton. Over this the two foot-soldiers of the principal sherd wear skins the tails of which hang down between their legs (Fig. 9, p. 149).² It is probable that throughout the LH period a more sophisticated form of cloak was in use, for in Shaft-grave VI, which contained two male interments, a stout bronze pin³ was found with a perforated upper end. From IV, which contained three male and two female interments, come three massive gold pins of excellent workmanship.⁴

¹ That a tunic was worn in some parts at least of Bronze Age Europe is known, and by some continental scholars the tunic is regarded as an Aryan contribution to the culture of Greece; but the tunic is also at home in the Near East.

² In view of the fact that there are, after the Shaft-grave period, no examples of the Minoan loin-cloth except in the fragmentary bull-leaping frescoes of Tiryns (Schliemann, *op. cit.*, pl. xlii; *Tiryns*, iii, pl. xx) and Orchomenos (H. Balle, *Orchomenos*, i, pp. 71 ff., pl. xxviii), Valentin Müller's suggestion (*Jb.* 1927, pp. 15 and 16) that the skins are representations of the kilt variety of loin-cloth characteristic of Crete is untenable.

³ *Schachtgr.*, pls. xc and xcvi, nos. 924; *Textb.*, pp. 162 and 173.

⁴ *Schachtgr.*, pl. xviii, nos. 245-7.

Schliemann's notes on this grave do not indicate the position of the pins in it, but in view of the evidence from VI there can be no doubt that they belonged to the three men. Though metal pins are extremely rare at Mycenae, bone pins are common enough in the chamber-tombs¹ and in LH III graves elsewhere, and testify to the existence of a garment which they were necessary to secure. There are indications therefore that the traditional costume of Greece—chiton and chlaina in Homer, chiton and himation



FIG. 51

in the classic age—goes back to the MH period; for VI, though within the Circle, is virtually MH in culture and its occupants presumably wore the dress which was regular until a wave of Minoan fashion introduced the loin-cloth. For the chiton we have found on the Siege vase monumental evidence going back to the Shaft-grave period and establishing a remarkable continuity; the dress of the flute-player on the Chigi vase c. 650 is identical with that of the young hunters of Tiryns. As for the chlaina, no one but the young men of Sparta has ever faced the winter of the Greek mainland without a second garment, and there is no reason to suppose that in the Bronze Age this took any other form than the simple length of woollen stuff which was general in the classical age.

It is probable that the earliest form of fibula, comparatively abundant at Mycenae and found on a number of LH III sites, was used like the

¹ Wace, *Ch.T.*, p. 212, n. 21. Four bone pins were also found in a LH chamber-tomb at Asine (*Asine*, p. 420); a bronze pin was found in a LH III house at Korakou and a bronze fibula of safety-pin type in another (*Korakou*, p. 109, fig. 133).

straight pin to fasten this cloak; the size of a number of specimens suggests that they were designed for garments of considerable weight (Fig. 52).¹ They seem to occur singly in cases where the circumstances of the find have been recorded.² The straight pin, however, was never superseded.

Apart from the size of a good many examples, there is no reason for assigning the LH III fibula to one sex or the other. Tomb A at Moulianá in Crete, however, yields definite evidence of its use by men, for a large pair of the early arched or bow type was found associated with the cremation,³



FIG. 52

together with the fragments of an iron sword, and two pairs occurred with a male skeleton in the already cited proto-Geometric grave on the island of Skyros;⁴ there was nothing, however, to show how they were worn. Elsewhere it is exceptional to find two fibulae with a male skeleton, as the sub-Mycenaean graves of the Kerameikos and the Geometric and archaic of the del Fusco cemetery show.

The appearance of the fibula in Greece can be dated only in the roughest manner. Its extreme rarity in Bronze Age Cyprus (where a single example of LH III type from Enkomi is presumably an import⁵) coupled with its absence from Mycenaean Rhodes shows that its introduction is subsequent to the period of Mycenaean expansion and colonization in the first half of the fourteenth century, and its absence from the well-found tombs at Dendra agrees with this. On the other hand, a single example of Mycenaean type (unpublished) occurred in the Mycenaean stratum at Tarsus, whose beginning cannot be put earlier than 1250 and is probably rather later, about 1230 or 1225. The introduction of the fibula into Greece cannot therefore be much later than 1250 and must be earlier than 1225. It is tempting to associate it with the advent of the 'divine-born' rulers whose grandsons were in many cases heroes of the Trojan War.

Turning to women's dress in Bronze Age Greece, we find the Shaft-graves strangely barren of material. Apart from the women of the Siege vase,

¹ See, e.g., *Fibules*, pp. 48-51, especially the examples reproduced in figs. 11-13, 15, 16, and 19. The length of that in Fig. 52 (= *Fibules* fig. 19) is 20 centimetres. The specimen is imperfect, having lost half the catch and a spiral disc in which it terminated.

² See, e.g., *Praktika*, 1910, p. 154, where the finding is recorded of a single fibula in each of three chamber-tombs at Thebes.

³ The cremation is proto-Geometric, the inhumation, which had no fibulae, sub-Mycenaean. See *Eph. Arch.*, 1904, p. 47.

⁴ *AA.*, 1936, p. 232 and fig. 1, p. 229.

⁵ *Exc. in Cyp.*, p. 36, fig. 27; *Fibules*, p. 51, 10 a.

who are not Mycenaean and whose dress is too slightly indicated to yield any information, the Shaft-graves contained only three representations of clothed women, viz. a pair of small figures in gold leaf¹ in Minoan dress and a golden figure similarly attired, attached (with appurtenances which do not concern us here) to a silver pin curved over at the top.² All of these come from III, which contained three interments, all female. The nature of the pin is uncertain. Karo (op. cit., p. 187) is inclined to regard it as a hairpin; Professor Wace, however, has suggested a different use which would suit the curved stem, viz. to stiffen and decorate the front of the short Minoan jacket.³ The Goddess ring, found in the immediate neighbourhood of the Shaft-graves, not improbably looted from one of them and in any case belonging to the same period, also shows Minoan dress and no other. Whether or no the Goddess is really meant to be nude above the waist is a moot point. Probably she is, like her ivory sister from Ugarit;⁴ her skirt, however, is purely Minoan.⁵

In LH II, in which representations of women on engraved rings and gems become more frequent on the mainland, Minoan costume is invariable. Presumably it was worn at royal courts, for it alone appears in the frescoes which adorn the LH III palaces of Mycenae, Tiryns, and Thebes.

The use of ten straight pins,⁶ all from Shaft-grave III, cannot be determined. Most of them are simulacra made for the grave, mere husks of gold leaf which once enclosed a wooden core; consequently we cannot estimate the weight or power of resistance of their counterparts in real life. Karo's tentative interpretation as hairpins has much in its favour; he points out that the enormous diadems of III, in two cases found actually resting on the skulls, imply a bulky and elaborate coiffure of which our few monuments give us no picture. Whether hair- or dress-pins, they indicate a divergence from Minoan custom, as do also two large, straight bronze pins (length 20.7 and 22.7 cm.) with heads of rock-crystal. These, together with the head of a third, were also found in III;⁷ each occupant therefore possessed one. Though it is true that almost anything can be worn on a head dressed with sufficient elaboration, they do not look like hairpins; they may have been used to fasten a cloak or shawl, in which case they would mark yet another

¹ *Schachtgr.*, pl. xxvii, no. 36; Textb., pp. 49 and 181; Schuchhardt, p. 198, fig. 182; Bossert¹, 194 a.

² *Schachtgr.*, pl. xxx, no. 75; Textb., pp. 54-5 and 182; Schuchhardt, p. 194, fig. 172; Bossert¹, 187. Cf. V. Müller, *AM.* xliii (1918), p. 134, who points out that though the dress is purely Minoan, the adjuncts betray Hittite influence.

³ *A Cretan Statuette*, p. 9; cf. p. 16, and *P. of M.* i, Frontispiece and p. 504, fig. 362 a. Kurt Müller (*Jb.* xxx, 1918, pp. 298 ff.) thinks that the pin belongs to a peplos; as it has no fellow, we should have to suppose that one has disappeared without leaving a trace.

⁴ *Syria*, x (1920), pl. lvi; Bossert¹, 503.

⁵ In a LH II chamber-tomb at Dendra which shows close affinity with that at Isopata near Knossos a small faience figurine of a woman in Minoan dress was found. There can be little doubt that it represents the Great Goddess. See *NT.*, p. 57, fig. 65.

⁶ *Schachtgr.*, pl. xvii, 95-6; Textb., pp. 57 and 180.

⁷ *Schachtgr.*, pl. xxxi, 100-4; Textb., pp. 57-6 and 186.

departure from Minoan practice. A shawl, the first example of the kind, is draped round the two female figures of the ivory carving recently discovered at Mycenae.¹ A set of non-Minoan ornaments also comes from III in the shape of three pairs of double-spiral ear-rings of massive gold.² A fourth and more elaborate pair from the same grave shows Minoan elements in its decoration, but is wholly unlike any ear-rings, contemporary or later, from Crete.³

That the great ladies of Greece, at any rate in those centres which betray Minoan influence, continued in LH III to wear a dress in the main Minoan is the inference naturally to be drawn from the frescoes of Mycenae, Tiryns, and Thebes which recognize no other form. It is true that fresco-painting preserves to the end a peculiarly strong Minoan convention and may in the fourteenth century have been the work of artists who had left Crete after the collapse of Knossos; but as men are represented with the non-Minoan chiton of the mainland, it cannot be supposed that the women are depicted in a dress which they had ceased to wear. A fresco from Mycenae shows the upper part only of women seated at windows (Pl. XXVII, 2),⁴ but the fragments of Thebes⁵ and Tiryns,⁶ which admitted of complete reconstruction, give the full-length figures of women walking in procession and carrying ritual vessels. Their dress, close-fitting jacket and bell-skirt (Pl. XXVIII, 1 and 2), is purely Minoan; the lady of Thebes wears a chemise under her jacket, but so does the dancing girl of Knossos.⁷ On the limestone tablet of the shield-goddess⁸ from Mycenae (Pl. I) the Minoan skirt of the right-hand worshipper can be plainly seen; the figure of the other is badly faded, but appears to wear a garment which covers her bust and whose heavy upper border shows it to be something more than a chemise. It may represent the jacket, but possibly we have here a dress of which we shall presently find other evidence. The female charioteers of the Boar-hunt

¹ *JHS*, lix (1939), pl. xiv c.

² *Schachtgr.*, pls. xx and xxxii, 53-5; Textb., pp. 51-2 and 187; Schuchhardt, p. 193, figs. 169-71. Karo follows Evans (*The Shaft-graves and Bee-hive Tombs of Mycenae*, p. 47) in assuming an ultimately foreign origin in central or eastern Europe or in the Second or Third City of Troy, but Blegen and Waco (*Middle Helladic Tombs, Symbolae Osloenses*, 1930, p. 34) regard them as an indigenous development, seeing a prototype in a simpler pair found in a MH grave at Drachmani in Phocis (*Eph. Arch.*, 1908, p. 94). An earlier connexion with Anatolia, however, is indicated by two pairs found at Alishar Hüyük in Stratum II, 3, each associated with a skeleton. These have an exact parallel in an early MH context at Asine (*Asine*, p. 259). Dendra (*NT*, p. 6, figs. 89-91) has yielded what appear to be ear ornaments for suspension from the top of the head.

³ *Schachtgr.*, pls. xx and xxxii, 61.

⁴ *AM*, xxxvi (1911), pl. ix; *P. of M.* ii, p. 410, fig. 236; Bossert³, 44.

⁵ *Deltion*, 1917, p. 339, fig. 133; *Eph. Arch.*, 1909, pl. 2; *P. of M.*, ii, p. 748, fig. 483; Bossert³, 40.

⁶ *Tiryns*, ii, pl. viii; Bossert³, 33-4. The proud pose of the lady of Tiryns is reproduced on a late and degenerate sherd from Mycenae (F. and L. xli, 426) on which is represented the upper part of a woman with both arms extended in front of her, probably a reminiscence of fresco.

⁷ *BSA*, viii, p. 55, fig. 28; Bossert³, 27.

⁸ *Eph. Arch.*, 1887, pl. x; *AM*, 1912, pl. viii; *P. of M.* iii, p. 135, fig. 88; Bossert³, 43.

fresco of Tiryns (Fig. 44, p. 315) wear a straight garment which covers them from the neck downwards as far as their bodies are visible.¹

It may be taken for granted that the elaborate Minoan dress was not adopted all over the country, nor, probably, anywhere except by the upper class. Even in the early part of LH III we have hints of a different costume, which in all probability is the native dress come down from the MH age. It is illustrated by the terra-cotta female figurines commonly found on LH III sites and especially in tombs.² Generally speaking, they are executed in a style too summary and conventional to convey much information; but the all but universal form of body, columnar from the waist downwards, testifies against the Minoan bell-skirt, and the bust is always completely covered by the dress (Fig. 53). Whether the dress is a one-piece or a two-piece it is impossible to say. It is indicated below the waist by a few vertical lines, sometimes no more than two, and above by a series of vertical or oblique stripes which cover not only the bust but the arms, as can be plainly seen in the case of the 'crescent' type, with upraised arms (Fig. 53*a*). This could hardly by itself be taken as evidence of long sleeves; but in a few cases the arms are represented plastically and decorated with a separate series of stripes, which certainly convey the impression of sleeves to the wrist (Fig. 53*c*).³ These figurines apparently belong on the whole to the earlier part of LH III. They occur at Zygouries with early LH III material,⁴ but only one has been found in Kephallenia⁵ where the Mycenaean sites appear to belong almost exclusively to the end of the period. Only two are known from the very late Mycenaean stratum at the Scoglio del Tonno near Tarentum,⁶ and they, like the Kephallenian example, are poor specimens. They do not occur in Mycenaean Cyprus, but that may be because the local nude female figures took their place. A few examples of comparatively early date are known from Palestine, especially from Tell Abu Hawam,⁷ where several occurred in a stratum which the excavator is inclined to date 1400-1230. That they were not found in the tholos tomb (first half of the fourteenth century) at Dendra nor in the considerably later cenotaph may be due to a difference of royal practice, for they occurred abundantly in the chamber-tombs on the same site.⁸

After the frescoes of Thebes and Tiryns the most explicit illustration of female dress in LH III is the figure of the woman on the Warrior vase,⁹ and it tells us little enough. It is uncertain whether the dress is a one-piece or a two-piece; though the light panel down the front of the skirt is somewhat in favour of the latter alternative. To all appearance the sleeves are long.

¹ *Tiryns*, II, pl. xii; Bossert¹, 32.

² *Zygouries*, pp. 203 ff., figs. 192-3; cf. 194.

³ P. et C. vi (*La Grèce Primitive*), p. 745, fig. 338; Schliemann, *Tiryns*, pl. xxv *k* and *i*.

⁴ *Zygouries*, p. 205.

⁵ At Lakkythra (*Eph. Arch.*, 1930, p. 37, fig. 36).

⁶ Besides one figured in the small guidebook of the museum at Taranto (p. 32) there is the lower half of a second.

⁷ *DQAP*, iv, p. 54.

⁸ *RT.*, pp. 83-5 and 88.

⁹ F. und L., pl. xlii.

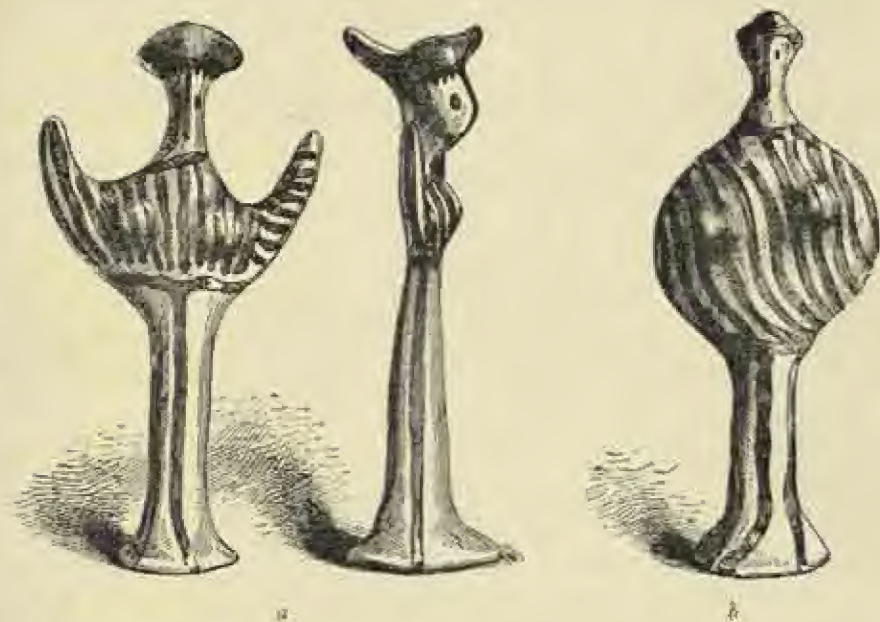


FIG. 53

for the arms are represented in silhouette down to the wrists, whereas the legs, visible for some way above the ankles, are in outline throughout. The arms of the warriors, however, are also in silhouette, and though a long-sleeved leather jerkin is not an impossibility, it lacks all analogy in the contemporary armature of which we have knowledge—Shardana, Pulesati, Cypriot, Egyptian, and Hittite. On the other hand, the Warrior vase and stele form a pair in several respects unique; the absence of a parallel is therefore not conclusive. In the case of the woman, who unfortunately does not appear on the stele, we have the parallel of the long-sleeved terra-cottas. It may be that her dress survives in a well-known Boeotian type of archaic terra-cotta representing a goddess, seated or standing. Her skirt has in front an elaborately decorated panel, and when her arms are fully rendered, they appear to be sleeved to the wrist.¹ On the Warrior vase the peak above the woman's forehead suggests a head-veil, which is quite foreign to Minoan dress and also to the terra-cottas. These often have a high diadem or polos, and their hair is generally indicated, sometimes plastically, as hanging uncovered down their backs. In other respects, however, the Warrior vase dress may be a clumsy rendering of Minoan costume, the jacket, seen in profile, appearing to cover the breast.

It would seem that a dress was widely worn which would require fastenings, for objects which it is difficult to interpret as anything but buttons, whatever the nature of the garment which they fastened, are forthcoming in abundance from LH III graves; hardly any excavation lacks its quota.² The objects in question are generally conical, sometimes biconical in shape, truncated at the narrow end or ends, and have a vertical perforation. In LH III they are of steatite; but they have a few precursors of terra-cotta in LH I and II, one of which comes from Shaft-grave III³ and must therefore have belonged to a woman. Two of the clay specimens were once coated with gold leaf. All were originally regarded as spindle-whorls, and it is possible that some, especially those of terra-cotta, served this end; the considerable numbers, however, in which the steatite specimens have often been found,⁴ together with the small size and light weight of many

¹ Grace, F. R., *Archaic Sculpture in Boeotia*, figs. 17, 18, 20.

² Wace, *Ch.T.*, pp. 217 ff.; Blegen, *Prosymna*, p. 312.

³ *Schachtgr.*, pl. clxvi, no. 163. On the whole subject see Wace, loc. cit.

⁴ Tsountas records the finding of 160 in a single grave (certainly a chamber-tomb) at Mycenae (Tsountas and Manatt, *The Mycenaean Age*, p. 174) and similar tombs at Asine have yielded 32 and 38 (Frödin and Persson, *Arsae*, pp. 376 and 420). As chamber-tombs normally contain several interments, these amounts are probably to be divided among several owners, of whose number and sex there is unfortunately no indication. Of the 32 in the Asine tomb 6 were found close together and presumably belonged to a single outfit, whether a typical one or not there is no saying. A cist-grave on the same site (op. cit., p. 355) contained a single example, and so (p. 390) did a chamber-tomb; it is possible that these were whorls. The terra-cotta examples found at Malthi in all strata of the settlement from EH to LH III (*The Swedish Mycenae Expedition*, pp. 335-6) were in all probability whorls. Only one was found in a grave; in the houses they sometimes occurred in groups. There were only three or four of steatite and they were small and presumably buttons. They are not found in either material in Cyprus, where Greek dress underwent at least a modification, as will be shown below; but steatite

of them, rule out this explanation in most cases. They can hardly be anything but buttons, of a type which is still in use especially in south-east Europe,¹ secured by a cord or leather thong knotted at the large end, passed through the perforation, and attached to the garment at the other.

That a shaped and sewed dress was in use throughout LH III is therefore certain; that it lasted into the sub-Mycenaean period seems clear, since, as we have seen, only a minority of the sub-Mycenaean graves in the Kerameikos contained pins, the indispensable adjunct of the peplos which supplanted it. The steatite buttons are found no more, probably because the material was no longer imported from Crete;² but substitutes of wood or leather may have been used. Even the pin-users, however, do not seem always to have been content with the peplos as sole garment, for the fibulae found in some of the two-pin graves remain to be accounted for. So long as the peplos was fastened by unprotected pins of great and sometimes enormous size, the wearing of any additional garment but an under-dress would be very awkward, especially if the pins were inserted point upward, as we see them on the François vase. A narrow and fine shawl could be worn scarf-wise without extra fastenings, passing between the pins and the neck; a larger one might be passed under one arm and over the other shoulder and there secured by a third pin or, preferably, a fibula. Such an arrangement is suggested by the two fibulae of the sub-Mycenaean grave 27 in the Kerameikos (p. 340, *supra*) which lay one on the right breast and one at the right side of the neck, and by the single fibula on the left breast in 46 and 47. In 70 the two fibulae at the top of the breast may have secured the opening of a chiton worn under the peplos. The four fibulae, two on each side, in 42 are perplexing, but can hardly have closed the sides of the peplos, since there is no evidence that it was ever left open on both sides. Presumably they secured a shawl draped in an unusual way.

It is obvious that the Ionic himation could not be worn either over the head or over the shoulders along with a peplos fastened by unprotected pins. In the comparatively rare cases where fibulae take the place of straight pins at the shoulders, as here and there in the del Fusco cemetery, regularly in the cemetery at Vroulia, and perhaps generally in Rhodes, the explanation probably is that the owner wore some over-garment which pins would have excluded.

We see then that the history of women's dress in the Late Bronze Age is complicated and extremely obscure, and also that its course does not run parallel to that of the men's. The essential element in male dress, the tunic, goes back to the Shaft-graves and therefore in all probability to the MH period, and the straight pins, which are to some extent definitely

examples are frequent on the decidedly late LH-III sites of Kephallenia (*Eph. Arch.*, 1932, pls. xiv, xv, and xvii, and 1933, p. 92, fig. 40). They also occur there in terra-cotta (*ibid.* 1932, p. 14, fig. 15).

¹ e.g. in Croatia.

² Crete has a large native supply, which was used from EM II onwards (*P. of M.* iv. 232).

associated with male burials, make the presence of a wrap extremely probable; nor have we any reason to suppose that either went out of use in the dark interval between the end of the Bronze Age and the seventh century, in which the documented history of Greek dress begins. The tunic agrees in such particulars as are identifiable with the chiton of epic; and as the chiton it is known ever after. Known, that is, in literature; for what the man in the street called his shirt is hidden from us. Doubtless 'chiton' came to be very widely used, even as in Victorian England 'chemise' had almost ousted its Anglo-Saxon equivalent 'shift' before the disappearance of the garment itself. The word, however, is foreign, Semitic not perhaps in ultimate origin, but to the extent that the root is found in several Semitic languages, in words which variously denote flax, linen, and a linen garment. It is highly significant that the word is firmly established in Homer, which in this case means in epic tradition—a point which will be further discussed below.

As its name shows, the chiton must have been a linen garment which originally was imported into Greece from the East. Egypt is the home *par excellence* of fine linen, but the chiton was presumably shipped, like βύβλος, from a Phoenician or Syrian port. This might have happened in the first half of the second millennium as the Egyptian and Aegean objects found in a grave of that date at Byblos show;¹ the LH II goblet from Tell Duweir is, however, the earliest evidence for relations between this region and mainland Greece, and the fourteenth century, to which belong the foundation of the Mycenaean settlement at Ugarit and the colonization of Cyprus, is a more probable date for the importation of a shirt *de luxe* which ousted the name, though hardly the substance, of the native counterpart. Linen had long been known in Greece. In both a fine and a moderately coarse form it occurred in the Shaft-graves in fair quantity,² sometimes as the lining of sword-scabbards, and its manufacture and the growing of flax doubtless go back much farther. If, however, the native garment were made of wool and if, after the importation of the chiton began, this were largely discarded in favour of linen, this might help to account for the spread of the foreign name, first learned in Phoenician ports.

3. DRESS IN HOMER

It is now possible to attempt an equation between the epic data and the various forms of dress, both men's and women's, which we have reviewed. It will be convenient to begin with the men's dress and with that universal and indispensable part of it, the chiton. The word can hardly be a novelty in epic diction. It occurs in several formulae, identical or very

¹ Syria, iii (1922), pp. 275 and 296 ff. and pl. lxiv; Mon. Piot, xxvii (1924), pp. 1 ff.

² Schachtgr., Textb., p. 71 (no. 228), p. 142 (no. 784), p. 145 (no. 816), pp. 295 and 251. Some of this may, of course, have been imported, but it seems unlikely that the coarser fabric was.

slightly varied, some of which form a complete line (*Ω* 588, *γ* 467, *ψ* 155, ἀμφὶ δέ μιν φῶρος καλὸν βάλεν/(βάλον) ἤδ' ἐ χιτῶνα; *δ* 50, *κ* 451, *ρ* 89, ἀμφὶ δ' ἄρα χλαῖνας οὐλας βάλεν/(βάλον) ἤδ' ἐ χιτῶνας; *π* 79, *ρ* 550, ἔσσω μιν χλαῖνάν τε χιτῶνά τε, εἵματα καλά; while the element χλαῖνάν τε χιτῶνά τε εἵματα enters into a number of other combinations and links the chiton with the epic equivalent of the himation. Moreover, it has given rise to the standing epithet of the Achaeans χαλκόχιτῶνες and to two figurative expressions, χάλκεος χιτῶν (*N* 439) and, more significant, λαῖνος χιτῶν (*I'* 57). On these grounds alone it is hardly conceivable that Homer was the first to introduce the word into the hexameter line, and the supposition that he was lands us in further difficulties in view of the admitted Eastern origin of the name. Linen chitons may indeed have been imported by Greeks of the eighth, especially the later eighth, century, but they would be foreign rarities, and the newfangled term could not possibly have been stretched to cover the dress of the common soldier (*B* 262), the serf (*ξ* 72), and the beggar (*ν* 434). If we go back beyond the eighth century, we come first to that period in which, as Thucydides (i. 6) implies, wool was the only wear in Greece and as the graves of the Kerameikos, of Thessaly, and even of Assarlik and Crete reveal, foreign trade was almost non-existent. The word χιτῶν must therefore have been generally received into Greek in the earlier part of LH III at latest, and in the proto-Geometric age it must have been applied to the native counterpart whether in linen or in wool. It is a pity that we do not know whether this was its form in Achaian speech, nor when and how the Ionic καθῶν came into being.

Though Homer gives us little information, direct or indirect, about the material of the chiton, it is a fairly safe assumption that when worn by king or noble it must be pictured as of linen. There can be no doubt about the superfine specimen in which Odysseus left home,¹ delicate and glistening like the skin of a dried onion, but on the other hand it can hardly be taken as typical, since it was memorable enough to be cited twenty years later as a possible means of identification. The simile, vivid and unique, rather suggests that Homer had seen and records something quite exceptional, perhaps an import from the East. It is called σιγαλόεις, 'shining', an epithet which, like the whole description, is inappropriate to a woollen material; and the chiton which Telemachos wore on his visit to Menelaos is similarly described.² Clothes in general (εἵματα) are twice called σιγαλόεντα,³ both times in connexion with laundry-work; and linen would be washed much more frequently than woollens. Other epithets—μαλακός, νεκτάρεος, νηγάτεος—are too general or too obscure to be of much service.

There is nowhere any hint that the chiton is an imported article. It is certainly linen that is woven in the palace of Alkinoos, for up to modern times oil (cf. *η* 107) has been used in many regions to give a glossy finish to

¹ *τ* 232.² *ο* 60.³ *X* 154, *ζ* 26.

linen, but it has no place in the preparation of wool.¹ It is true that Alkinoös is not a Greek, but his court reflects Greek manners at the date when the heroic monarchy is giving place to oligarchy and the setting, so far as we get hints of it in dress and architecture, is Greek also. Homer does indeed say (γ 109-11) that the Phaeacian women are peculiarly skilled in their handicrafts, but there is no suggestion of anything exotic in the material they handle. Consequently there is a certain presumption that there was nothing in the epic tradition to suggest a foreign origin for linen or for the garments made from it.

The Homeric chiton agrees with those of LH and most archaic Greek monuments in being extremely short;² a hero sits on his bed alike to put it on and to take it off.³ The verbs for putting it on are *δύω*, *ἐνδύω*, *δύνω*, *ἐνδύνω*, i.e., to 'enter' it, which suggests pulling over the head; pins are never mentioned in connexion with it, and this, as we have seen, agrees with the archaeological evidence throughout.

There are indications of a more voluminous chiton, perhaps of wool, worn by the lower classes. Eumaios has to gird his as a preliminary to killing a pig;⁴ we might suspect this to be a parody of warriors in the *Iliad* girding themselves for war, since in that poem the zoster is a piece of military equipment not worn in civilian life, were it not for the confirmation of Hesiod that it was worn by the humble as an aid to exertion.⁵ No belt is mentioned in connexion with the upper-class chiton and none is worn by the helmsman of the Siege vase. In many of our Bronze Age figures the waist is concealed; but the young hunter of the Tiryns fresco has a narrow, apparently non-metallic girdle which answers well enough to the *ἱμάτιες* which the Trojan captives wear over their chitons.⁶ The fashion, however, did not change; in archaic vase-painting a narrow girdle which does not seem to be of metal is commonly worn with the chiton. As opposed to the skin-tight tunic of the young Odysseus, we have an indication of the greater length and voluminousness of his rags; his scar cannot be seen till his rags are shifted,⁷ nor yet the muscles of his thigh,⁸ whereas the blood of the wounded Menelaos trickling down his thighs was visible to all.⁹ These humble chitons are doubtless to be thought of as woollen; the poor could always more easily spin and weave the wool of their sheep than grow flax and prepare it.

There is no need to linger over the chlaina, which plays the part of the himation in later Greek dress. It is worn for warmth and is therefore certainly of wool; moreover, one of its epithets is *οὔλη* 'with a curly nap'

¹ Hence the chitons of the dancing youths on the Shield of Achilles (Σ 592-6) are also of linen.

² In archaic art there are examples of longer chitons, apart from the *ποδήμης*, and as even the most sheath-like chitons are generally shown pulled up through a narrow girdle, it may when ungirt have reached to the knees or even lower. It is, however, normally worn short.

³ *B* 42, α 437. Cf., however, α 222.

⁴ ε 72.

⁵ *Op.* 345.

⁶ *Tiryns*, ii, pl. xi, no. 5; Φ 30-1. The epithet of the chiton—*στρεπτός*—has not been satisfactorily explained. It occurs with *χρῆς* in *E* 113. See p. 206 *supra*.

⁷ τ 450, 467-8, φ 221.

⁸ α 66-74.

⁹ α 146.

(δ 50, κ 451), which has a clause to itself in the case of a third instance (K 134). It is also called ἀνεμοσκεπής and ἀλεξάνεμος¹ and sometimes serves as a blanket;² sometimes it is so large that it can be worn double.³ Plainly it is a plaid, not sewed or made up in any way. Further, it may be dyed, for it appears as φαινικόεσσα and πορφυρέη.⁴ Like the chiton with which it is often coupled it is worn by all classes, as the passages already quoted in connexion with the chiton suffice to show. Twice the purple or crimson chlaina of a prince is said to be fastened by a πῖν or clasp,⁵ and this, as we have seen, agrees with the evidence of men's graves in our two cemeteries.

The chlaina remains under the prosaic name of himation a regular part of Greek male dress; further, as happened with chiton, the new term is extended to the corresponding female garment. The poetical equivalent of himation—εἶμα—appears in Homer chiefly in the plural, with the general meaning of 'clothes' which is also that of himatia. In two passages, however, it occurs in the singular—in ξ 500-2, where it is equivalent to chlaina, and in Σ 538, where it is worn by a female figure, the Ker, a non-traditional and certainly intrusive element in the decoration of Achilles' shield, ἀμφ' ὤμοισι as the Ionic woman wears her himation. Like the chiton, however, the chlaina is never in Homer worn by a woman.

Like chlaina, φᾶρος means a piece of material, which may be used as a garment or applied to other ends. It can denote a sheet, for of the two which Achilles gave with a chiton for the dead body of Hector, only one is used to array the corpse; the other must have been merely spread over it as the φᾶρος λευκόν of Σ 353 was laid over the corpse of Patroklos.⁶ φᾶρος is also applied to the shroud which Penelope weaves for Laertes and which is described as ἡλίου ἐναλίγκιον ἢ ἐσλήνη.⁷ φάρεα are supplied by Calypso for the sails of the raft of Odysseus.⁸ When it serves as a garment it is normally, like chlaina, a man's cloak, but differs in that it is peculiar to the upper classes and is never said to be worn for warmth. It forms, however, the principal, indeed the only garment of Calypso and Circe, ἀργυφρον, λεπτόν καὶ χαρίεν.⁹ Studniczka's conclusion that the word means primarily a length of a specific material and that that material is linen can hardly be doubted. To the descriptive expressions already quoted we may add the evidence of the adjective ἐὺπλυνός,¹⁰ never applied to the woollen chlaina. Only two passages conflict with the hypothesis, viz. Θ 221, where Agamemnon's φᾶρος, in B 43 called simply μέγα, one of its most frequent epithets, is said to be πορφύρεον, and θ 84, where that given by Nausicaa to Odysseus is similarly described. Whether fine linen was ever dyed in the early

¹ Π 224, ξ 529.

² e.g. γ 349-50, λ 180, τ 312.

³ K 133-4, τ 225.

⁴ K 133, δ 115, τ 225, φ 118.

⁵ K 133-4, τ 225.

⁶ Ω 580, 588; cf. Σ 231. Cf. the law dealing with funerals common to the Greek states: κατὰ τὰς αἰσχροτάτας θανάτῳ ἐν ἐμασίῳ τοῖσι λευκοῖσι σπρώματι καὶ ὠδύματι [καὶ ἐπιβλήματι] ἐξέται δὲ καὶ ἐν ἐλπίσσοισι. Ziehen, *Legg. Sac.*, p. 260, no. 93 a.

⁷ θ 971, ω 147-8.

⁸ ε 258.

⁹ ε 230, κ 543.

¹⁰ θ 392, 425, τ 67, π 173.

age of Greece may be doubted:¹ with only primitive means available the process would be difficult and the results probably unsatisfactory. In any case it seems unlikely that the distinctive glistening whiteness of linen, whose proper enhancement is embroidery, would be sacrificed. There is no reason to regard either of the two passages involved as traditional. It may be that in the eighth century the word had lost its sharpness of definition and was merely felt to be suitable to describe the cloak of a gentleman, whatever its material.

Before leaving the subject of men's dress, we may consider the names of two of its regular constituents. It is uncertain whether *chlaina* is of I.-E. origin, and since it is not recorded in Arcado-Cypriot, there is no positive evidence that it was part of the Achaian vocabulary. It is, however, frequently coupled with *chiton* and enters into at least two phrases² which have their definite place in the hexameter line. In Attic-Ionic the word lived on in the vernacular with the specific meaning of *warm* cloak,³ but thanks to its epic associations it has also a place in serious literature. Herodotus uses it to describe foreign cloaks—those of the Chemnitai and those which the Scyths made out of human skins.⁴ No doubt the poetic word had, like our own 'robe', a convenient vagueness. When Herodotus describes either a Greek cloak which he and his public could visualize, or a foreign article of which he wishes to convey a clear picture, he uses the precise terms *χλαρίς* and *χλαυδιον*.⁵ *Μεγάγχλαινοι*,⁶ however, the descriptive name of a Scythian tribe, doubtless came from Ionian colonies on the shores of the Black Sea; and the Latin *laena* must have come to Italy through trade either directly with Ionia or with her colonies in the West.

In serious poetry *chlaina* is used mainly in the sense of 'blanket', with a conjugal or amatory allusion.⁷ As something like a blanket it figures at the opening of the Labyadai inscription, where it is prescribed as the covering for the corpse.⁸ In Homer *φᾶρος* occasionally replaces *chlaina* in a formula which contains the word *chiton*, but so simple a substitution by no means implies a long previous existence in the hexameter. The word is of unknown origin. It has been proposed to connect it with *Pharos*, but the *ā* consistently maintained in epic makes this improbable. Nor is there any evidence that in pre-Alexandrian times *Pharos* was a mercantile port which might have given its name to an export. It is possible that the word

¹ The only positive evidence which Studniczka (op. cit., p. 87) can adduce is that of the ill-omened sail which Theseus forgot to remove, and which, according to Simonides (54 B. 33 D.), had been dyed scarlet with the galls (or, strictly, the insects they contained) of the *πρίνος* (*Quercus coccifera*, kermes oak), but sail-cloth cannot be classed as fine linen. Cf. Paus. x. 36. 1.

² *χλαῖνός τε χερῶνά τε, χλαῖνι καὶ βύβινι στυγέσθω.*

³ Hipponax 16-18 B, 24 a D; Aristoph. *passim*, esp. *Birds*, 712, 715, 1090; cf. Moeris, p. 408, *χλαῖνι Ἀττικῶν, ἡστέον χαμῆριον Ἑλλήνων*. In Hesiod the *chlaina* is part of the small farmer's winter dress: *Op.* 537.

⁴ II. 91. 4; iv. 64. 3.

⁵ *iii.* 739. 2; *i.* 195. 1.

⁶ *iv.* 30. 2.

⁷ See Pearson's note on Soph. *Fr.* 48; and Jebb's on *Tr.* 539.

⁸ Zechen, *Legg. Sac.*, ii, p. 217, no. 74 C.

is connected with *φάραι*, explained by Hesychius as *ὀφθαίνειν*, *πλέκειν* and both again, as W. Schultze suggested, with *φορμός* and *φορμηδόν* but this takes us no farther.

The word is used once by Hesiod,¹ of the white veils of *Aidōs* and *Nemesis*, in a passage which will be referred to below, and once in the Homeric Hymns,² where it is worn by Dionysus and described as *πορφύρεον*, an obvious echo of Homer. In tragedy *φάρος* (or *φάρος*) is never used of a man's garment but once,³ and then it is ascribed to Anchises probably as a mark of effeminate barbarism. In Aeschylus and, with the one exception noted, in Sophocles it is used either of sheets or of women's dress in a general and unspecified form. Euripides uses it chiefly of women's dress, twice of head-veils, but once of sails;⁴ so do Bacchylides⁵ and, as already noted, Simonides, both with reference to the ship of Theseus. All three of course had their warrant in Homer's similarly unique precedent.

Like *chlaina*, *φάρος* is twice used by Herodotus⁶ to denote foreign articles. It is applied to the 'web' offered in Egypt to Demeter at the festival of the Return of Rhampsinitus and must surely indicate such a 'robe' as the maidens of Alkman's Partheneion offer to their goddess. Conceivably the word may have been used in the language of ritual; but in the second Herodotean instance it was probably chosen for its splendid Homeric associations. At all events, it is used in the epic sense of a large and magnificent wrap, designed for a man, though a woman appropriated it to her undoing. These two Herodotean examples hardly seem sufficient to justify the inclusion of the word in the Ionic vernacular.⁷ The only example in literature known to me which suggests a possible popular use is in *AP*, vii. 268, where the *φάρος* appears as the 'last rag' of which the long-shore prowler strips the shipwrecked corpse, but even this may find a parallel in *Soph. Frag.* 291 (P.) *ἀναιδείας φάρος*. The word seems to owe its existence in literature to its appearance in epic; and the use in epic may merely reflect the transient use of a foreign name for a foreign import.

One article of male attire remains to be noted—the *ζῶμα*, probably identical with the *ζῶστρον* which is mentioned once only.⁸ The *ζῶμα* appears on three occasions, in *Δ* 187 and 216, in *Ξ* 482, and in *Ψ* 683. In the

¹ *Op.* 198.

² *Hym. Dion.* 5-6.

³ *Soph. Fr.* 373 Pearson (374 Nauck). Aeschylus has it with one possible exception, Sophocles invariably has it, Euripides fluctuates. The obscure *ἀναιδείας φάρος* (*Soph. Fr.* 291) may also be noted.

⁴ *Her.* 1081.

⁵ *xvi.* 5.

⁶ *ii.* 122. 3; *ix.* 209. 1, 2, 3. I can see no justification for Rawlinson's translation of the first passage which makes the priest wear the 'mantle'. It must have been a very small affair if Herodotus is correct in his statement that the priests wove it on the day on which it was offered; possibly it was a mere 'token' offering. 'To wear' is not expressed by *ἔχειν* but generally by *ἔχειν*, or, if a verb is used, by *φορεῖν*. Nor is Godley's rendering in the Loeb edition convincing; *μίτρη* is surely not the *φάρος* but the bandage with which the priest was blindfolded.

⁷ By Rutherford, *The New Phrynichus*, p. 22. Nor is Rutherford right in stating that Herodotus entirely ignores *himation* in the singular, in the sense of 'cloak'. He uses it twice in this sense—*ii.* 121 c. 4, *iii.* 8. 1—as well as its more dignified equivalent *ἐλμα*.

⁸ *ζ* 38.

last case there is no dispute about the meaning; the ζῶμα is the περίζωμα of classical prose, the loin-cloth worn by competitors in athletic contests and maintained in use at Olympia till the year (720) of the victory in the foot-race of Orsippos, who by accident or design got rid of the encumbrance in mid-course.¹ The loin-cloth frequently occurs in sixth-century art and is found over a fairly wide area: Crete, 'East Greece' (perhaps Rhodes or Samos), Clazomenae (on a fifth-century sarcophagus), and Athens, but invariably in peaceful scenes.² Only one example is known from lands strictly Greek of its combination with the chiton.³ It has never been found in conjunction with the corslet, a fact for which there is a natural explanation. When the corslet was worn, the chiton was indispensable to prevent chafing of the skin; presumably there was not room under the plate corslet for the ζῶμα as well, or rather perhaps for the very solid girdle which must have supported it and which is well shown on the Cretan figurines cited above. This perhaps explains why it does not appear in the first and longest list of the defences penetrated by the arrow of Pandarus;⁴ while the audience, once the corslet had been interpolated, would inevitably assume the presence of the unmentioned chiton.

Turning to our Homeric data, we find that at the funeral games for Patroklos ζῶματα are produced for the boxers (Ψ 683-5) and are also used in the wrestling-match which immediately follows (710). Obviously the competitors discarded their chitons, though this is not expressly stated.⁵

Whatever the ζῶμα was, therefore, it was not a chiton, and the explanation of it as such given by the Scholiast on ξ 482 will not stand, though he is justified in pointing out that οἰοχέτων in 489 appears to imply that this is the meaning. It will be noted that Odysseus is in battle-dress; so, in Δ, is Menelaos in the only other episode in Homer in which the word occurs. Here confusion reigns, and for a full discussion of the passages involved reference must be made to pp. 247-50 *supra*. With the first (Δ 133 ff.) we are not here concerned, since the word ζῶμα does not occur in it; but only with the formula, slightly varied by difference of case, of 186-7 and 215-16; the words concerned are: ζωστήρ τε παναίολος ἥδ' ὑπένερθεν | ζῶμά τε καὶ μίτρη. Admittedly the meaning of the word μίτρη cannot be established with absolute certainty; but there is no reason why ζῶμα should mean anything but what it means in Ψ. This implies that in the pre-Homeric prototypes

¹ Paus. i. 41. 1, and Frazer's note ad loc.

² Crete, two bronze figurines, one a kriophoros (Lamb, *Gl. and R. Bronzes*, pl. xxv b and c); 'Fikellura' vase with komasts (Boehlan, *Aus ion. u. ital. Nekropolen*, pp. 56-7, figs. 26-8; A. S. Murray, *Terra-cotta Sarcophagi Greek and Etruscan in the British Museum*, pl. 16); black-figured amphora with scene of olive-gathering (*Cat. VBM*, ii, B 226). This use of the loin-cloth in ordinary life is reflected in ξ 38, where ζῶματα appear as the male counterpart of the women's σάβλα. It is also found in a few mythological scenes; see *JHS*, xix, pl. vi, 1.

³ On a mitra from Axos in Crete, *AM.*, 1906, pl. xxiii; Lamb, *op. cit.*, p. 61, fig. 3. The combination is also found on Cypriot monuments; see P. et C. iii, p. 527, fig. 355; *Orbis Pictus*, iii (Frühgriechische Plastik), fig. 2.

⁴ The weals which start out on the sides and shoulders of the contestants are evidently supposed to be visible to the spectators (716-17).

⁵ Δ 132 ff.

on which these episodes are based the heroes concerned were not wearing chitons. That Odysseus had a body-shield has been argued above (p. 188). It is possible that his equipment is another of those indications of Cretan derivation which pervade all his reminiscences except the Apologoi. No such indications attach to Menelaos; here the chaos arises from failure to realize that the new and alien word *μίτρη* denotes an object identical in essentials with the long-established *ζωστήρ* (*v. supra*, p. 250). However that may be, it would seem that the heroes of these two episodes originally appeared in the battle costume of Minoan Crete and of the Shaft-graves of Mycenae.

WOMEN'S DRESS IN HOMER

Apart from a variously named head-dress or veil, women's dress in Homer consists of a single garment. Athena has only one to doff, Hera, Calypso, and Circe one to don.¹ In spite of the reticence which governs Homer's allusions to feminine charms and feminine toilets, it is certain that no article is suppressed; Odysseus resumes his entire equipment (chiton and chlaina) in the morning, and it must be presumed that Calypso and Circe with *φᾶρος* and *ζώνη* do the same. The names of this one-piece dress are three: *εἰνός* or *εἰδνός*, which is found only in the *Iliad*; *φᾶρος*, which is confined to the two passages cited from the *Odyssey*; and *πέπλος*, which is the commonest, which is found in both poems, and which, alone of the three, has given rise to compound adjectives which are stock epithets. These are *ἑσπεπλος*, applied both generally and to the Achaeides; *ἰθακείπλος*, used only of the Troiades, whether to indicate a non-Greek characteristic of Trojan dress it is impossible to say; *τανύπεπλος*, applied repeatedly to Helen, but also to Thetis and to two mythological figures; *κροκόπεπλος*, an epithet of Dawn.

That peplos is the most general term for a woman's dress appears from ζ 38, where, as noted above, it makes up with *ζώστρα*, the man's dress, and *ρήγεια σιγαλόεντα*, the sheets, the entire laundry list of a great house. Like chlaina and *φᾶρος* peploi are used as coverings, e.g. of chairs and chariots.² We know nothing of its material. The peploi in which is wrapped the golden larnax containing the ashes of Hector³ are purple and therefore presumably of wool, but this tells us nothing about the dress. Its distinctive epithet is *ποικίλος* (or *παμποικίλος*), which would suit equally well a woollen fabric with inwoven patterns or figures in contrasting colours or a linen one richly embroidered. *A priori* the case for accepting Studniczka's identification with the pinned blanket-dress is strong, crude though the costume is; worn as sole garment and with the immense straight pins of the Kerameikos, it may fairly be called barbaric. Presumably it was worn by the womenfolk of the first Hellenic colonists of Asia Minor. On the linguistic side it may be argued that the compound adjectives into which

¹ E 734, S 178, ε 230, α 543.

² η 95-7, E 194.

³ Ω 776.

it enters suggest that it is not quite a new-comer in the hexameter. Finally, there is one passage—but only one—in Homer¹ which suggests that a dress secured by pins with unprotected points was current, viz. that in which Aphrodite is ironically supposed to have got her scratch from the golden *περόνη* of one of the *Ἀχαιιάδων ἐντέπλων*. The image it evokes is very like the charming group of two Bacchantes on an amphora in Paris,² of whom one is in Doric, the other in Ionic dress; but here, while the former has carelessly flung her arm round the neck of her pinless friend, the latter cautiously enfolds the Laconizer at a lower level. The straight pin, however, as we have learned from the finds at Ephesus, remained in use in Ionia and would be equally dangerous if it fastened a shawl or himation on one shoulder, as the brooch sometimes did in later days.³ A second possible instance is afforded by the Phoenician maid, who could conceal three gold cups in her kolpos. Here the pinned dress is not improbable, for we have found indications of a social distinction or of a different dress worn by men of the lower class; women slaves might well wear the old simple blanket. On the other hand, the Ionic chiton also has a kolpos, as the figurines from Ephesus show, which would be easily accessible if the dress opened down the front. While it is quite possible that in the proto-Geometric age *πέπλος* denoted the pinned blanket, it appears to be used more loosely by Homer.

The crucial passage in regard to women's dress in Homer is that which describes the toilet of Hera, *Ξ* 178–80. The dress which she puts on is a *ἑανός*, but as both Studniczka and Thiersch assume its identity with the peplos, the name need not detain us here. Her action is described by the verb *ἀμφι...* *ἔσαστο*, a non-committal term. *ἔσασθαι* is used alike of Calypso assuming her *φῆρος* and of Odysseus donning chiton and chlaina (*ε* 229–31), i.e. the verb could cover the action of *ἐνδύειν* appropriate to the chiton and of *περί...* *βάλλεσθαι*, used of the cloak (*B* 42–3). *ἀμφιέσαστο* is used of Calypso dressing Odysseus in his *εἵματα*, i.e. chiton and chlaina as before (*ε* 264); *περί δ'...* *εἵματα ἔσσον* (*II* 670) is used of arraying a corpse. The word cannot have evoked a sharp visual image. There is no clue in this passage to the material of the *ἑανός*. *ξύνειν* probably means 'to make smooth', by what process we are not told; the result would be desired for any fine fabric, woollen or linen.⁴ *τίθει δ' ἐν δαιδάδα πολλά* would equally well describe embroidering a linen dress resembling that of the priestess of Ephesus and weaving a figure pattern such as Helen wrought (*I* 125–7) into the fabric of a fine web of wool, and there is nothing to show whether the action *τίθει* is contemporaneous with that of weaving or subsequent

¹ *E* 423–5.

² *MuZ.* 523.

³ Gerhard, *AV.* 183. An apparently unique example of the straight pin appears on the Villa Giulia krater, *Gr. Vm.*, pls. 17–18.

⁴ *ξύνειν* in classical Greek means some piece of gala dress. Little is known of it, and some of the statements made are conflicting; it seems, however, to have been dyed purple or saffron in some cases, which would point to wool as the material (Schol. Aristoph. *Nub.* 70).

to it.¹ The one thing that we are told about the *ἐσθῆς* is that Hera fastened it *κατὰ στήθος*—down the front—with *ἐνέrai*. The word is unique and its precise meaning unknown, but the object must have possessed a pin, since the verb used is *περονήσατο*.² To fasten a dress down the front with straight pins would be impossible; the *ἐνέrai* therefore must have been fibulae, brooches, or some kind of clasp with pins. It is surprising to find such a scholar as Leaf accepting without protest Studniczka's assertion that *περονᾶσθαι κατὰ στήθος* is a perfectly natural way of saying 'to pin on the shoulders'. It did not appear so to the ancients; *οὕτως ἡμεῖς κατὰ τὴν κατακλείδα τοῦ ὤμου* is the comment of Schol. A. It is in fact on the collar-bone that the fastenings of a Doric peplos come to rest, as any one who has experimented knows, the pull of the material at the back establishing equilibrium, and this is where the red-figure vase-painters put them.³ Even on the François vase (Fig. 54),⁴ the solitary monument on which Studniczka relied to prove this part of his thesis, it is only the head of the great pin that hangs a little lower; even so, it would not occur to any unbiased observer to say that it is placed *κατὰ στήθος*. Further, the final appeal is not to the rendering of a sixth-century vase-painter, but to the behaviour of the pin in actual use.

Nothing therefore suits the description

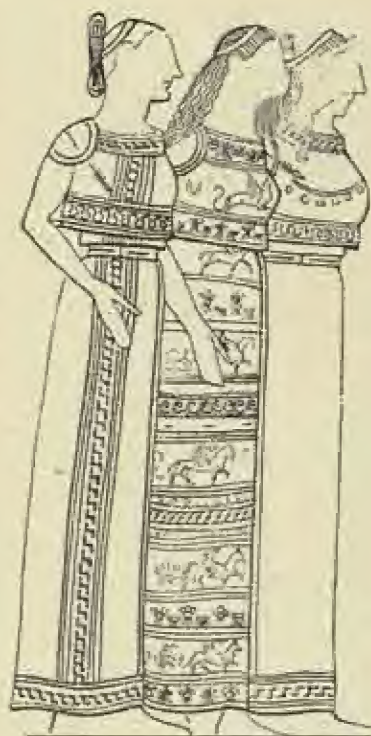


FIG. 54

¹ Helen and Andromache (X 441) are both described as weaving the designs into the fabric, which is purple and therefore woollen. The verb used is *ἐκράσσειν*. This weighs slightly in favour of giving *ῥάβδῃ* a different meaning. For Andromache's *ὄπισθεν* see Bechtel, *Die griechischen Dialekte*, I, p. 448.

² This disposes of van Leeuwen's suggestion that the *ἐνέrai* are hooks and eyes, for whose existence, moreover, archaeology offers no evidence. van Leeuwen has, however, the merit of rejecting by implication, though not expressly, the view of Studniczka and Thiersch. *ἑνέριον* is used, characteristically, by Callimachus (fr. 149 Schn.) and also occurs in an elegiac poem recorded in an inscription from Marathon of the second century A.D. The inscription, which is known only from a squeeze, describes a procession in which the ephebes take part, wearing *χλαῖμα* fastened on the shoulder *ἐνέριον* (*Alusie Belge*, xvi, p. 71). The fragment of Callimachus also refers to the fastening of a cloak. In both cases the round brooch is probably meant.

³ See, e.g., the girl in Doric dress, *Gr. Vm.*, pl. 17; Eriphyle, *ibid.*, pl. 66, 2; girl with Athena, *Muz.*, 513; Iris, *ibid.*, 518.

⁴ There does not seem to be any parallel *in corpore* for the François pin.

of Hera's toilet but a dress like that of the queen on the Hittite relief (Pl. XXIX, 3), i.e. an Ionic chiton with an opening down the front closed by fibulae or something of the sort. It may have reached Ionia from Caria, which is known to the *Iliad* as a land where articles of luxury were produced;¹ the tradition recorded by Herodotus as to the immediate source of the Ionic chiton may be correct.

The peplos offered by Antinoos to Penelope² next claims attention. Its epithets—*μέγας, περικαλλής, ποικίλος*—are unilluminating. All we are told is that it was accompanied by twelve gold fibulae, of whose use nothing is said. Studniczka, having *ex hypothesi* to find accommodation for them on a Doric peplos, hit on the expedient of using them to fasten the open side from the girdle to the hem. He proposed in support a solitary illustration, viz. the figure of Athena on a Corinthian pinax,³ interpreting the pattern of her dress as a vertical row of fibulae, or rather as the reminiscence of such an arrangement, which he does not claim to have survived in real life to the date of the pinax. His illustration has been generally rejected and requires no comment; but Thiersch, who accepts his thesis and proposes the only other monuments which have been cited in support of it, is even more unfortunate in his choice of them. They are two red-figure vases, falling as late as the second third of the fifth century. On one⁴ the relevant figure is that of a girl in Doric dress wreathing a fillet round the horns of an ox as a preliminary to its sacrifice. Her right side is turned to the spectator; and a border of two parallel black bands, united at intervals by cross-strokes arranged in pairs, runs from a point in front of the shoulder to one a little above the lower edge of the dress, passing under the arm on the way. On Thiersch's view the black bands represent the edges, front and back, of the peplos, and the cross-strokes a series of fibulae by which they are held together. It will be noted, firstly, that the cross-strokes have not the faintest resemblance to fibulae; secondly, that the two black lines are on the same edge of the peplos, for though one of them disappears at the front of the shoulder, a pair of alleged fibulae is plainly visible there. On Thiersch's hypothesis the fibulae should cease below the arm-pit and the black lines should there diverge and appear one behind and the other in front of the shoulder. That they do not reach to the lower hem, which is unbroken, might be put down to careless execution; but a further point to be noted is that, while a dark band, sometimes double, near the edge, vertical or horizontal, of the peplos, is common,⁵ and also at either end of

¹ *J* 141-2; cf. Herod. v. 88, 1.

² *Ant. Denkm.*, 1886, pl. 7, 15; Studn., p. 96, fig. 27; *HE*,² p. 204, fig. 59. The solution originated with K. O. Müller, from whom Studniczka (p. 93, n. 6) quotes it, though in connexion with another matter. Cf. art. *πῆδος*, Steph. *Thesaur.* (Firmin-Didot).

³ *Mon. Ant.* ix (1899), pl. i; *MaZ.* 519. The vase, an amphora in the British Museum, is signed Polygnotos and is by the Naucratis painter, c. 440.

⁴ e.g. *MaZ.* 513, 524. Cf. those on the peplos of Iris on a vase representing the birth of Athena (A. H. Smith, *Sculptures of the Parthenon*, p. 10, fig. 7), which are united by a serried row of cross-strokes. About 35 are visible and others are concealed by the under-girding.

the himation,¹ it never forms the actual edge, but is, as one would expect, a little removed from it. The two black bands therefore are not on different edges of the peplos, which is sewn up in the ordinary manner, but together form an ornamental border near one edge.

The irrelevance of this illustration becomes still more certain when we examine Thiersch's other vase.² Here on a Doric peplos worn by Demeter a similar pair of black bands united by cross-strokes run from the front of the shoulder to the edge of the deep, girt overfall, below which the bands, still united by cross-strokes, run continuously to the lower edge of the garment. Throughout they are nearer to the median line of the figure than to its side and obviously have nothing to do with the side-opening. Since Thiersch has nothing further to adduce, there is no monumental evidence that fibulae were used in the way propounded, and, as we have seen, none from their disposition in graves; and as the hypothesis, if applied to the dress of Hera, further involves a mistranslation of the Greek, it is allowable in spite of the general acceptance it has found to discard it.

The true solution may be that Antinoos gave six pairs, or possibly three sets of four fibulae, to afford variety. In the Geometric grave in the Kerameikos already mentioned (p. 346), besides the gold-plated, iron shoulder-pins, five bronze fibulae were found, fastened one into another so as to form a chain. There was one large fibula, one pair of medium, and one pair of small size. The single fibula suggests a fastening for a himation; the pairs must be the fastenings of a peplos, but whether one pair was worn at a time, as at Vroulia, or both simultaneously it is of course impossible to say. The Elgin gold fibulae, almost certainly the yield of a single grave, also form two pairs, a large or medium and a small. To multiply fastenings would prevent concentration at one point of the severe strain on the material of the peplos.

Another method of wearing fibulae is suggested by Pinza,³ who draws attention to the fashion discussed above (p. 355) of closing the upper edges of the Ionian chiton not by a seam but by a row of buttons.⁴ As has been there pointed out, there is no evidence for this fashion earlier than the sixth century and none that fibulae were ever used. Negative evidence, however, must not be rated too high in a period of which so little is known.

¹ This is characteristic of the work of Brygos (*MuZ.* 470-33), but by no means confined to it. While the horizontal border of the peplos and the transverse stripe at either end of the himation would be produced by the simple expedient of taking a wool thread of a contrasting colour, a vertical stripe would require warp threads of a contrasting colour. Otherwise the design must have been embroidered.

² On a vase in the Bologna Museum. See *Mus. It.* ii, pl. i, 1 and Roscher, s.v. 'Kora', ii, p. 1378, fig. 20.

³ *Hermes*, xiv (1909), pp. 522 ff.

⁴ These do not, however, always serve a structural purpose; see, e.g., *MuZ.* 318, where the fine folds of the chiton are gathered into an unbroken neck-band. In these cases the head would still have to be pushed through the head-hole, and the only object of the unsewn sleeve would be to give glimpses of the upper arm between the buttons.

especially in Ionia, where the evidence of graves is lacking. While Pinza's solution may possibly apply to Penelope's peplos, with its twelve *περόαι*, it is plain that when he seeks to extend it to Hera's *ἑσπέρη* and applies *κατὰ στήθος* to the outer side of the upper arm, he has taken leave of common sense. We are not entitled to assume that the two dresses are the same; the difference of name might rather suggest that they are not, but the question remains open. From one quarter only is there definite archaeological evidence of the use of a considerable number of fibulae to fasten a dress down the front, viz. from graves distributed over Etruria, Picenum, and elsewhere in Italy and dating to the period in which Greek and Oriental influences first make themselves felt there. Fibulae numbering five and six have been found on or about the breast of skeletons proved by the other contents of the grave to be female.¹ In one case out of six fibulae found in a row down the chest three were clasped each into a ring of bronze, which presumably had been sewn on to the edge of the slit opposite to that in which the fibulae were inserted.² A pair of rings might be used in the same way. Fibulae with one ring attached in this manner are known from Thebes (one) and from Tartus (Arad) on the north Syrian coast (one). One with two rings was found at Amathus in Cyprus, and another at the sanctuary of Zeus Thaulios near Pherai.³ It must be added that another specimen from the same site has five rings, a number which does not lend itself to the suggested explanation, and that fibulae carrying even larger numbers have occurred elsewhere in Italy, e.g. at Cumae.⁴ In other women's graves in Italy as many as twenty and twenty-one fibulae have occurred,⁵ but with no record of their disposition. To this class must have belonged the exceptional Grave CCCCXXVIII in the del Fusco cemetery, which contained a very youthful female skeleton equipped with four pins and twenty-five fibulae.⁶ The position of many of them could not be determined; twelve miniature fibulae, however, were found ranged in pairs down the median line of the trunk. While Italian material obviously cannot be assumed to have any bearing on the text of Homer, the Anatolian and East Greek affinities of Etruscan culture must not be forgotten. The best hope of clearing up the question lies in further excavation in Asia Minor.

Little can be argued from the fact that Athena when preparing to assume the chiton of Zeus apparently rids herself of her peplos by a single gesture (*E* 734). A girdle is indispensable for the Doric peplos and is at least generally worn with the women's Ionic chiton (though not with the

¹ From the list given by Helbig (*HE*,¹ p. 143) only those definitely known to be women's graves are cited. *Bull. dell' Inst.*, 1881, pp. 40 and 275 (5 and 6 fibulae), 1882, p. 44, six; *N.d.Sc.*, 1880, p. 77, six, 1881, p. 84, five.

² *Bull. dell' Inst.*, 1882, p. 44.

³ *Fibulae*, p. 181, viii, 9 d; p. 244, xiii, 12 i; p. 236, xiii, 2 a; p. 308, v, 1 d.

⁴ *Mon. Ant.*, xxi, pls. xx, 3; xxi, 3.

⁵ *Bull. dell' Inst.*, 1874, p. 57, and *N.d.Sc.*, 1880, p. 77.

⁶ *N.d.Sc.*, 1895, p. 167.

ποδῆρης χιτῶν of elderly men) from its earliest appearance in art, and must have been discarded as a first step, but there is no mention of this nor of any fastening by pin or fibula; we have, in fact, so bare a summary of what Athena did that it has no evidential value in either direction. On the whole, since 'peplos' appears to be the oldest word in epic for a woman's dress, it seems most probable that she was wearing the pinned blanket, as the Scholiast supposes,¹ and whipped off a pair of shoulder-pins; but she might equally well have removed a couple of ἐνεταί from a frontal slit in her Ionic chiton and pushed the garment off her shoulders. κατέχευεν certainly excludes pulling off over the head, which in the case of the man's tunic is expressed by ἐκδύνω.²

The omission of all mention of pins or fibulae in the toilets of Calypso and Circe (ε 230 = κ 543) must be differently judged. Here there is no hurried action afoot to enforce compression of the narrative. The gleaming white φᾶρος can only be of linen, and the καλύπτρη which is assumed as the last article of dress is the shawl or the head-veil which regularly accompanies the chiton on Ionic monuments. The use of φᾶρος for a woman's dress is, as has already been said, unique in Homer, and though φᾶρος reappears in Hesiod (*Op.* 198-200) as an article of women's attire, it is, like the men's, a wrap, since it can be used as a veil.

The question of the head-covering is not without importance, for, as has been indicated, anything like a shawl is hard to reconcile with unprotected shoulder-pins. Rhodes, more sophisticated than Syracuse, apparently solved the problem by taking to fibulae; from the end of the seventh century onwards the difficulty is got over by the substitution of the brooch for the straight pin.

As a wrap which plays the part of Ionic himation as recorded in black-figure vase-painting is a regular part of the Homeric lady's costume, it follows that she cannot have worn unprotected shoulder-pins, and there is in fact only one allusion (*E* 424-5) to such in the poems. She could of course have used fibulae, like the ladies of Rhodes; but the delicate quality of many of the Ephesian fibulae suggests that in this Ionian town they were made to fasten something less ponderous than the woollen peplos. It is improbable that in the eighth century the women of Ionia were still strangers to the linen chiton, when Gordion was importing linen of the finest sort little if at all later than its close.³ Hera's *milieu*, far from being traditional, is extremely up to date. Her κρυπτή κληῖς, whatever its precise nature, must be an advance on Penelope's primitive bolt-pusher, ivory-handled though it were and destined to a long life both as temple- and cupboard-key in the classic age.⁴ Homer mentions no Oriental perfume, but Hera's ἑδανόν

¹ This appears to be the implication of BT: τὰς περὶ τὰς λύσας καταφέρειν αὐτὴν ἀφῆκεν.

² α 437.

³ G. und A. Körte, *Gordion*, pp. 45-6 and 253.

⁴ Diels, *Parmenides Lehrschrift*, pp. 117 ff.

ἔλαιον, the only personal scent which appears in the epics,¹ cannot have been very different from the μύρον of Neobule,² whose ἐσμυρισμένα κομὰι καὶ στήθος could stir even an old man to madness. Whatever record of a more primitive dress may have survived in Homer's sources, it would not have interested the female part of his audience; it is safe to assume that here at least the costume he depicts is contemporary. The tasselled girdle also points to a relatively late date and to Oriental influence. Tasselled girdles are unknown in the Minoan-Mycenaean world, and the fringed garments characteristic of the East make their first appearance in the Aegean area on the Warrior vase. Studniczka³ rightly indicated the Oriental character of Hera's girdle, and Helbig⁴ sought an Assyrian origin for it; but though the Assyrian evidently revelled in fringed raiment, no convincing example of a tasselled girdle has been adduced. Helbig's illustration from an Assyrian relief is not to the point, for what is there represented is the fringe of a short mantle at the place where it is given a preliminary turn round the body before being brought over the shoulder.⁵ Consequently Studniczka's identification of Hera's girdle with the article worn by the woman behind the lyre-player on the Olympia corslet⁶ falls to the ground. As a tasselled girdle it is not convincing; it is probably a mistaken rendering of some such Oriental original as the short mantle just cited. Helbig's second example (p. 209, fig. 61), a fragment of a silver girdle from Marion in Cyprus, is entirely apt; from the lower edge of the engraved plaques which form the girdle hangs a row of close-set, bell-shaped pendants of silver.

Further, the discreet epithets with which Homer celebrates women's beauty contain nothing to indicate the peplos and exactly suit the chiton. Since we have no proof that in historic times the open peplos was ever worn except at Sparta, we cannot demand that even Nausicaa and her maids, the only unmarried girls who figure in the poems, should be φαινο-μηνίδες. The side of the bosom, however, past which on the peplos hypothesis the Phoenician maid smuggles the three goblets into her κόλπος, passes unremarked, and so, even more surprisingly, does the upper arm, which together with the point of the shoulder is necessarily exposed by the peplos. On the other hand, λευκάλευρος gives the exact measure of what the chiton would leave visible. No woman's βραχίον is ever mentioned, but the πρήξαι of Penelope are, once with the epithet λευκά,⁷ and so are those of Aphrodite,⁸ reminding us how keenly alive the Greek was to anything that he could see.⁹

¹ Z 483 offers a possible second instance, but not in a context containing early or traditional elements.

² Archilochos, 30 B., 26 D. Cf. Schol. T ad loc.

³ *HE* 2, pp. 206-10, fig. 60 (= P. et C. ii, p. 455, fig. 205).

⁴ *Allg. Tracht*, pp. 121-2.

⁵ Compare the two left-hand figures in the second register ('Homage of Jehu') of the 'Black Obelisk' of Shalmaneser III in the British Museum.

⁶ *Allg. Tracht*, p. 122, fig. 43.

⁷ *ibid.* 240.

⁸ *E* 314.

⁹ Cf. the anecdote told of Theano, the alleged wife of Pythagoras, Plut. *Mor.* 142 c: ἡ Θεανώ.

That the *κρήδεμνον*, *καλύπτρη*, and *κάλυμμα* designate objects identical in essentials is certain; differences of size or material, if they existed, are not indicated. It has been suggested more than once¹ that the *κρήδεμνον* is not a veil but a mere snood or fillet for the hair; the statement, however, will not bear examination. The testimony of ξ 100 is by itself conclusive. Nausicaa and her girls divest themselves of their *κρήδεμνα* that they may



FIG. 55

not be hampered in their game of ball; a ribbon to keep the hair off the face is the last thing that would be discarded in the circumstances. In a four-times-repeated formula² Penelope is said to hold her *λαπαρά κρήδεμνα* before her cheeks when she shows herself in the *megaron*; such a gesture with a ribbon would be absurd, but is constantly exhibited in vase-painting

παρέθηκε τῇ χειρὶ περιβαλλομένη τὸ ἱμάτιον, εἰπόντος δὲ τινος 'καλὸς ὁ πῆχυν', 'ὦλλ' αὖ θεμόσιος', ἔφη.

¹ e.g. by Pinza; v. *infra*.

² α 334, π 416, σ 210, φ 65. The reason for the plural form is obscure, as the singular would suit the metre equally well, and is used of the *κρήδεμνον* which Iro gives to Odysseus; see next note.

by women in Ionic dress wearing a shawl over their heads. The evidence adduced in support of the other view is, firstly, that of Ino's κρήδεμνον¹ which, it is maintained, would make a better lifebelt if it were a ribbon, and, secondly, the phrase Τροίης ἱερὰ κρήδεμνα which occurs twice² and is supposed to refer to her encircling walls. The first argument cannot be taken seriously; as regards the second, it is plain that the true meaning of a word must be determined by its literal, not its figurative uses. The city is perhaps compared to a captive woman whose veil is torn off by her captor. One meaning of κρήδεμνον remains—that of 'lid' (of a wine-jar, γ 392), which implies a head-covering. ἐντεφάνω ἐνὶ Θήβῃ (T 99) gives the metaphorical equivalent of εὔτειχος.

The same meaning is implied in the terms καλύπτρη and κάλυμμα, and is also apparent in the account of Hera's toilet. The goddess washes and perfumes herself, plaits her hair,³ puts on her dress and girdle, and attaches her ear-rings. Then and only then she assumes the κρήδεμνον; κρήδεμνον δ' ἐφύπερθε καλύφατο δία θεάων. The καλύπτρη, ascribed to Hecuba in the *Iliad* (X 406) and in the *Odyssey* to Calypso and Circe, is cast off by Hecuba when she sees the body of Hector dragged at Achilles' chariot-wheels, and is assumed by the goddesses after dress and girdle, like the κρήδεμνον of Hera. κεφαλῇ δ' ἐφύπερθε καλύπτρην, where the verb understood is *περί* . . . βάλετο (ε 232); κεφαλῇ δ' ἐπέθηκε καλύπτρην (κ 545). A line in the *Hymn to Demeter* (197) shows how a poet not much later than Homer construed the word: εἶθα καθεζομένη προκατέσχετο χεροὶ καλύπτρην.

The black κάλυμμα which Thetis assumed when summoned to Olympus (Ω 93-4) is evidently a garment of the same type, and again the *Hymn to Demeter* adds its testimony (42): κνάνεον δὲ κάλυμμα κατ' ἀμφοτέρων βάλετ' ὤμων. Before assuming it, Demeter tore up her κρήδεμνα (the plural is in this case imposed by the metre)—ἀμφὶ δὲ χაίταις ἀμβροσίαις δαΐζετο. The Odyssean epithet λιπαρά suggests that the κρήδεμνον was of fine linen. κάλυμμα thus appears as the garb of mourning, but this is probably accidental, or rather perhaps the later poet chose the word which he found associated with mourning in Homer.

One head-dress, that of Andromache (X 468-70), remains to be dealt with; it is largely the difficulties of this passage which have led to the mistaken translation of 'head-band' instead of 'veil' for κρήδεμνον. They arise solely from 479, which contains three items apparently forecast by δέσματα σιγαλόεντα in 478, viz. ἄμπυξ, κεκρύφαλος, and πλεκτὴ ἀναδέσμη, which occur nowhere else in Homer and are in marked contrast with the simplicity of Hera's coiffure and of that characteristic of most archaic

¹ = 346, 351, 375, 459.

² Π 100, γ 388. κρήδεμνα πόλις (sc. Ἐλεσίνος, *Hym. Dem.* 151) is no doubt merely imitative; the meaning is certainly 'walls'. In *Sent.* 105 the singular is used (of Thebes); here 'citadel' would give the best sense.

³ That she does this before putting on her dress shows that the latter could be put on without disturbing her coiffure, but this would be easy if it opened far enough κατὰ στήθος.

Greek art. ἄμυξ indeed is guaranteed as current in epic language by the epithet χρυσάμπυκες applied to horses; it seems to have meant primarily the headstall of the bridle and was therefore a flat strap or band.¹ This original meaning lends point to the use of the word by the Chorus in the *Suppliques* of Aeschylus² when they fear to be dragged from the altar. Andromache's ἄμυξ therefore is a fillet, possibly identical with the στεφάναι worn by the girl dancers of *Σ* 597. Though the epithet χρυσάμπυκες as applied to female figures is non-Homeric (the *Horai*, *Hom. Hy.* vi, 5 and 12; the *Muses*, Hes. *Theog.* 916), ἐνστέφανος occurs in the epics as an epithet of Aphrodite several times, of Artemis once and of Mykene once; the incipient influence of the cult statue may perhaps be suspected.

As the references in L. and S.³ show, κεκρύβαλος maintained a real existence in classical prose, where it means, as it is assumed to do in epic, some sort of cap to keep the hair in order.⁴ Derived uses point to its having had, sometimes at least, the form of a net.⁵

To the nature of the πλεκτή ἀναδέσμη we have no clue, except that it cannot well have been of metal.

Two serious attempts have been made to find counterparts for these articles, for which archaic Greek art offers no parallels, though the evidence of the del Fusco cemetery and still more that of the Grave of Isis show that sometimes head-dresses of some complexity were worn. Helbig,⁶ turning once more to Etruscan monuments (Fig. 55), finds illustrations in tomb-paintings of the fifth century from Corneto, in which head-dresses are represented whose four parts answer well enough to the Homeric text. The κεκρύβαλος is represented by a high peaked cap, the ἄμυξ by strips of metallic appearance immediately above the forehead, the πλεκτή ἀναδέσμη by a thick roll (which, it is true, does not show any trace of being plaited except in fig. 55 *b*, where two strands are twisted round each other), and the κρήδεμνον by a small shawl, draped sometimes over the cap, sometimes over the shoulders. In view of the possibility, to put it no higher, of a real connexion of the Etruscans with Anatolia, this identification cannot be merely brushed aside. Andromache is not a Greek, and the poet may

¹ The fullest account of it is to be found in Schol., Pind. *Ol.* v. 15. The three examples of χρυσάμπυκες in the *Iliad* are confined to *E* and *K*.

² 431. Since according to all ancient testimony the ἄμυξ is a band of either metal or leather, the next word, πολυμήτωρ goes, as Tucker, *ad loc.*, maintains, with σάβανον and not with ἀμπύκων. Murray and Mazon follow Tucker; Wilamowitz perpetuates the error of Dindorf.

³ See Aristoph. *Thesm.* 257-8 and Rogers *ad loc.* Euripides accepts from Agathon a κεφαλή περιβρατος as the equivalent of a woman's κεκρύβαλος and μέγαρα; the latter is the equivalent of the Homeric ἄμυξ.

⁴ Arist. *H. An.* 507^b 4 (second stomach of ruminants); Xen. *Cyneg.* vi. 7, bag of hunting-net. Cf. Poll. *On.* vii. 179; κεκρυφαλοπλόκος, ὡς Κριτίας ἔφη.

⁵ *HE.* 2, pp. 219-20, figs. 63-6. A valuable confirmatory detail can now be added. The large round ear ornaments worn by three of the women in Fig. 55 (*a, c, d*) bear a striking resemblance to a pair of gold objects found at Dendra in a LH II context and also to two representations of much later date, on an ivory head from Sardinia and one of stone from Cyprus. *NT.*, p. 76, figs. 89-91.

have wished to stress her alien quality by her costume and have chosen his model from among the neighbours of Ionia. The discrepancy in date is of course considerable, but the dress might long survive its transplantation to a new home.

The second attempt is that of Pinza, who consistently seeks his prototype in Mesopotamia. For him also the *κεκρύφαλος* is a stiff cap or hood; the *πλεκτή ἀναδέσμη* is a plait of false hair for which he believes himself to find authority on certain Assyrian reliefs for which he gives no references, but which he describes as portraying women whose chignons under their hoods are so vast that they must have been artificially reinforced. The custom of wearing false hair he supposes to have spread from Egypt to Mesopotamia and thence to Syria, Anatolia, and Greece. The only monument for which he gives a reference is the well-known 'Fileuse' in the Louvre,¹ a miniature relief in black stone of uncertain, possibly Sargonid date from Susa, which represents a lady seated cross-legged on a stool and engaged in spinning. It is quoted for the *ἀναδέσμη* alone. The lady wears no hood, and her certainly very ample coiffure is confined by a simple band. The *πλεκτή ἀναδέσμη* is represented by three insignificant strands of hair, not plaited, which run obliquely from the top of the head to a point above the nape of the neck. It is impossible to distinguish them from the rest of the hair, which is of one quality; either it is all the wearer's own or else it is a wig. Pinza, who insists that the articles enumerated must be taken off in the order of enumeration, having now reached the *κρήδεμνον*, interprets it as a ribbon which beneath the false plait confines the lady's own hair. It must, he says, have had two long ends which could be brought forward and held in front of the wearer's face. Owing to his failure to document his archaeological parallels, the plausibility of his interpretation of the text cannot be judged. If, as the present writer believes, Andromache's head-dress is not Greek, but some Anatolian form known to the author of line 469, it may be that its ultimate origin is to be sought farther east; but so far we have been given no evidence.

Though we have found in Italy one head-dress as multifarious as Andromache's, the impression persists that the items are too numerous; Hecuba in like case (*X* 406) has only her *καλύπτρη* to cast off, and though the literary explanation offered by Scholl. BT of the difference in attire is ingenious, it does not convince. The possibility remains that there is something wrong with the text. The removal of 469 would leave a clear and simple description in complete accordance with 406. *δέσματα σιγαλόεσσι*, instead of anticipating *ἀμπυξ*, &c., would refer to the fillet or fillets—there is sometimes a second at the back of the neck²—commonly worn by women and sometimes by men as represented in archaic Greek art, and *τε* in 470 would be copulative, not explanatory. That the fillet is ostensibly

¹ De Morgan, *Délégation en Perse*, i, pl. xi and p. 159; *CAH.*, *Plates*, vol. i, p. 73 b.

² See, e.g., the two female figures behind Apollo on the Cretan corslet from Olympia, *Muz.* 135, and Artemis on the Melian vase, *ibid.* 108.

torn off before the *κρήδεμνον* is an example of *hysteron proteron* for which the case of Hecuba (X 406) offers a satisfactory parallel. The line is of the sort which might well be added by a seventh-century rhapsodist¹ who wished to heighten the local colour and emphasize differences between Greek and Anatolian of which he and his contemporaries must have been well aware though there are few hints of them in Homer.

The origin of the whole vocabulary of women's dress is obscure, including the not very important *ἀμπυξ* and *κεκρέβαλος*. *φᾶρος* has already been dealt with. As regards *πέπλος*, which we found some reason to think the oldest term in the epic tradition, it must be noted that the current use of it to denote Dorian costume has no ancient authority, though the convenience of thus distinguishing between Doric and Ionic makes it difficult to abandon. Though some Alexandrian scholars may have compared or identified the Homeric peplos with the pinned Dorian blanket of which they had only an antiquarian knowledge,² the fact that the word is not employed by Herodotus in the passage which constitutes our principal authority on the subject is conclusive against its bearing this meaning in ordinary Greek. In fact, it does not occur in his text at all except in a quotation from Homer.³ It continued to designate the peplos offered to Athena at the Panathenaia, and similar offerings elsewhere, and consequently figures in temple inventories;⁴ otherwise its only use in prose is to denote the 'robes' of Orientals, male and female.⁵

In tragedy peplos denotes mainly, though not exclusively, women's dress, but without precision, since it is often used in the plural.⁶ A peplos

¹ Cf. the closely similar case of *A* 33-7 discussed *supra* pp. 190-1. There it seems that 36-7 were designed to supersede 33-5, but failed to oust them. Whether 469 was meant to supersede or supplement 470 it is impossible to say.

² Some such ancient theory seems to underlie the comment in Eustathius 1347. 31: *πέπλοι γυναικείων φόρημα κατὰ τοὺς παλαιοὺς δ' ἐπεκρινόοντο αἱ γυναικες αἱ καὶ ἄνθρωποι ἐκαλεῖσθαι. Ἀλλὰ δὲ οὐ καὶ αἱ ἀρρεφῆδες ἐφέματός ἢ ἡδὲς διαμείβετό ποτε, ἐντυμολογημένη πρὸς τὸ διαπεπλάσθαι.* The last clause possibly alludes to Doric dress left open at the side.

³ II. 116 (Z 289 ff.).

⁴ Paus. v. 16. 2; viii. 5. 3. For the mention of peploi in the inventory of the temple of Minia and Anthesia see *IG*. iv. 1588.

⁵ Xen. Cyr. iii. 1. 13 (male), v. 1. 5 (female); the plural is used in both these cases. v. 1. 6 female and singular; *τὸν ἀνὴρα πέπλον*. The fact that *πέπλοφος* occurs in a papyrus of the second century B.C. (*Tebtunis*, i. 5, l. 250) shows that in Egypt *πέπλος* was still used to denote a material, possibly carpet. The papyrus deals with the manufacture of fine stuffs of which the Government had a monopoly.

⁶ It is unfortunate that we know nothing whatever of stage dress in the fifth century. It seems probable that *lokaste* wore the ancient Attic (proto-Doric) dress with a pair of unprotected shoulder-pins; if this is so, we should expect *Deianeira* to have the same. It is difficult, however, to imagine a dress which would conform to all the indications of *Trach.* 924-6. Those who translate *κατὰ πρῆθος* by 'on each shoulder' consider that their rendering is upheld by the words *προέκκιντο μαστῶν περὶ αὐτῆς*, but it is not clear how these should be construed. On the whole they would best suit a dress fastened by a brooch in the middle of the breast. Moreover, *Deianeira* is said to expose her left arm; but with any form of Doric dress this would already be visible.

several times ascribed to Xerxes in the *Persae* accords with prose usage; but the application of the name in the *Trachiniae* to the poisoned robe sent to Herakles is remarkable, since the garment is also called chiton. Presumably it was a *ποδήρης χιτών*. *ἑανός* shares the obscurity of the other terms, with an additional uncertainty as to whether it is one word or two. It occurs in Homer with a long *a* as an adjective qualifying *κασσιότερος*, *λίττι*, and *πέπλος*, and is taken to mean 'pliable' and with a short *a* as a noun meaning a woman's dress. On the whole opinion seems to be in favour of regarding noun and adjective as one, and in fact unaccountable variations of quantity are not uncommon in Greek; it is enough to mention *λίπαρός* and *λίπαρης*, where identity of root appears to be unquestioned, and *Κύθηρα* and *Κυθήρεια*, where it is generally accepted.

As to the original meaning of the word, it may be suspected that the poet was not quite clear about it. The noun is used to denote a one-piece garment worn by Hera (l.c.), by Artemis (*Φ* 507), and—if we accept *πέπλος ἑανός* as equivalent to *ἑάνος*—by Athena (*Ε* 734). The first and last have epithets which imply fine quality. Moreover, it is worn by Helen, though in what form is uncertain; it would seem therefore to be a fine and delicate garment, appropriate to the upper classes. On the other hand, the woman whose little girl runs by her side, tugging at her *ἑανός* and whimpering to be taken up and carried, can hardly be a princess, but she need not be of humble rank.¹ In any case, Herodotus implies that long before his own day the chiton had become the regular dress of the Ionian woman. As so often happens, Homer gives us in a simile a feature of the life he saw around him.

In the passages enumerated the *ἑανός* is manifestly the 'dress' *par excellence*, and this is the natural though not the inevitable translation of Helen's *ἑανός* when first mentioned.² When it is next alluded to, however (419), it can only mean a veil, the *ὀθόνα* in which (141) she had wrapped herself when she left the house, anxious to elude observation; nor is it impossible that this is its meaning in 385.³ It would seem therefore that the poet had no rigid conception of either the quality or the nature of the garment. Supporters of proto-Doric dress might argue that she turns up the overfall at the back over her head; but as *ὀθόνα* undoubtedly means fine linen, the dress cannot be Doric, nor is there any evidence that the overfall was in use so early. The Gorgon of the Rhodian plate lacks it.

Peplos may well have been originally the name of the old proto-Doric dress; it may be that at first the use of *ἑανός* was purely adjectival, to distinguish a dress of a different and finer material. In *ἑανός* and *φῆρος* we seem to have two different names for what was afterwards the Ionic

¹ *Π* 7-10.

² *Γ* 385.

³ *ὀθόνα*, however, in *Ε* 595 correspond to the chitons of the men and are certainly the dresses of the girls, not veils, which would be discarded for the dance. Actually, the word throughout denotes the material only, as in *η* 107.

chiton. *ἐσθῆς* does not occur in the *Odyssey*, nor *ῥάπος* in this sense in the *Iliad*. This may be mere accident, or again it may be due to a difference of date or locality. Whether the term *chiton* was not yet applied to women's dress in the eighth century, or whether the epic archaizes in avoiding it, there is nothing to show. It may have been the adoption of the *ποδήρης χιτῶν* by men which brought about the extension of the name to the virtually identical women's dress.¹

4. DRESS IN CYPRUS

From one quarter of the Mycenaean world come abundant representations of men wearing a garment which envelops them from neck to heel. They occur on the well-known class of 'chariot-vases' found principally in the Cypriot tombs for which they seem to have been designed; sherds, however, have also been found in Rhodes and in Greece. The technique is Mycenaean of the best period and the glaze, generally brilliant, is characteristic of the fourteenth century, but the rule which in Greece forbade the vase-painter to represent living creatures other than birds and marine animals did not run in Cyprus, and the dress, as indicated, is different from any for which we have evidence on the mainland. That the vases were produced by Mycenaean potters is certain and that they were made on the spot is hardly open to doubt. The subject of the paintings is uniform, though there is considerable variety of detail; a figure generally taken to represent the deceased appears in a chariot driven by a charioteer and is generally met or accompanied by other persons on foot. Possibly his arrival in the next world is depicted. The figures in the chariots are concealed from the knee or mid-thigh downwards by the side-panel of the chariot; their dress, however, so far as visible, is identical with that of the long-robed figures on foot. Unfortunately the painting is crude and the treatment largely conventional; but it is certain that in some cases and probable that in all a long chiton is intended. This is especially clear in the case of three walking figures on a krater found by the Italians at Ialysos.² It seems unlikely that this fashion, presumably based on Syrian models, ever spread to Greece. The robes are always spotted, which probably means variegated colour, and sometimes have transverse bands. They suggest the 'brightly coloured' garments which in later times figure repeatedly in Assyrian lists of tribute levied on Phoenician cities and in which Semites are depicted from their earliest appearance on Egyptian monuments. Whether the dress was already current in Cyprus at the date of the Mycenaean colonization we have no means of knowing; the new arrivals may have adopted it in consequence of their relations with Ugarit.

¹ The first example of *χιτῶν* applied to women's dress occurs in Sappho (62 B., 107 D.).

² *Annuario* vi/vii (1923-4), p. 234, fig. 130; Bossert², fig. 428; cf. a fragment from Enkomi, *Exc. in Cyp.*, p. 37, fig. 65, no. 1076.

A short chiton is also to be found in Cyprus. It is worn by a groom on a krater from the neighbourhood of Larnaka¹ who holds the horses of two chariots by the head, and in a longer form, reaching just to the knee, by a young hunter on an unpublished vase in the Nicosia Museum. Whether it is also worn by the figure with the scales on the Enkomi vase published by Nilsson² is not quite certain, for the muffled effect could be produced by a himation. Probably, however, the garment is a chiton, for on a sherd from Ugarit³ two young male figures appear (Pl. XXVII, 3) in the same type variegated garment coming rather below the knee. They wear swords of an Aegaeon type in a somewhat exaggerated form, which could not be girt on over a himation; the principal garment is therefore certainly a chiton, and a himation is indicated as well, draped over the shoulder and prolonged in a pointed end below the chiton before and behind. The himation is probably to be presumed in the case of some of the Cypriot figures whose arms are not shown. The 'half long' form of chiton, though unknown, so far as our evidence serves in LH III Greece, sometimes appears later in the orientalizing period of Greek art. A different type of chiton, resembling that of Shardana and Pulesati on Egyptian monuments, is worn by the Griffin-slayer of Enkomi; he is, however, a synthetic figure, improperly combining the Mycenaean boar's tusk helmet with the ribbed corslet and bare legs and feet of the Shardana and Pulesati. Probably of Phoenician workmanship, the figure cannot be assumed without question as evidence of what was worn in Cyprus.⁴

Pins and fibulae occur both in Late Bronze and Early Iron Age tombs in Cyprus, but owing to the practice of making multiple interments in a single grave and to consequent rearrangement it is very rarely possible to associate them with any particular deposition. In the course of the excavations conducted by the British Museum at Enkomi fourteen gold pins were found distributed among three graves in all of which Mycenaean pottery was present⁵ (19, 67, and 92); in a fourth (74) a long iron pin with an ivory head occurred. The recent Swedish expedition excavated twenty-two graves on the same site and in one (no. 8) found two gold and five silver pins,⁶ and further obtained three ivory pins, which occurred singly in different graves. Those in precious metal are ascribed to LC I, the immediately pre-Mycenaean period which is tentatively dated as lasting from 1600 to 1400, while twenty-six bronze pins from the necropolis of Nitovikla⁷ belong either to that period or to the immediately preceding

¹ *CVA. Brit. Mus.* i, Group II C b, pl. 8, 12; Walters, *The History of Ancient Pottery*, pl. xii.

² *K. Humanistiska Vetenskapssamfundets i Lund Årsberättelse*, 1932-3, i, pl. i.

³ *Syria*, xii (1931), pl. iii, 2; Bossert³, fig. 502.

⁴ The fairly numerous figures in silhouette on the vases, though they appear to be nude, are presumably to be thought of as wearing the short chiton; see *Cat. VBM.* i, 2, p. 66, figs. 110, 111, 112 a.

⁵ *SCM.*, vol. i, p. 496.

⁶ *Exc. in Cyp.*, p. 19, pl. viii, and fig. 38.

⁷ *Ibid.*, pp. 409 and 415.

MC III. Pins were therefore in ordinary use among the wealthy before the Mycenaean colonization; the poor may also have used them in wood. Whether they were used by men or women or both and for what purpose there is nothing to show, but an obvious use would be to secure the mantle we have seen on the chariot-vases.

Two bronze fibulae of true Mycenaean (i.e. safety-pin) type, though not of quite the earliest, have been found in Cyprus, one at Enkomi¹ and one on the habitation site of Mycenaean date which underlay the later sanctuary at Idalion.² From the same sites came two with a stilted forefoot,³ a type peculiar to Cyprus and evidently the first local modification of the Mycenaean import. A closely allied form comes from proto-Geometric Crete,⁴ one of several indications that Cyprus maintained relations with Crete after those with the rest of the Aegean area had ceased. Some half-dozen fibulae of gold from the last stage of LC III have been found on various Cypriot sites;⁵ they are, generally speaking, smaller as well as much thinner than their contemporaries in bronze and cannot have been used for heavy work.

The appearance of the fibula in Greece can be dated only in the roughest possible manner, but its extreme scarcity in Bronze Age Cyprus (where the two known specimens of Mycenaean type are presumably imports) coupled with its absence from Mycenaean Rhodes and Ugarit shows that its introduction is subsequent to the period of Mycenaean expansion in the first half of the fourteenth century. In the Mycenaean stratum at Tarsus, whose beginning cannot be put earlier than 1250 and is probably rather later than 1230, one Mycenaean 'safety-pin' fibula (unpublished) has been found. The introduction of the fibula into Greece therefore is not likely to be much later than 1250 and must be earlier than 1200. It is tempting to associate it with the advent of the 'divine-born' rulers, whose grandsons were in many cases heroes of the Trojan War.

Until the end of the Bronze Age, which includes the sub-Mycenaean, the fibulae of Cyprus reproduce the forms current in Greece, with the exception of the local variety with stilted fore-end and another non-symmetrical group also characteristic of sub-Mycenaean tombs.⁶ Many of these fibulae are of precious metal, and some are small and delicate.⁷ For this period and therefore in all probability for its predecessor two tombs in the

¹ *Exc. in Cyp.*, p. 16, fig. 27, no. 788 (tomb 38); cf. p. 68, n. 1.

² *SCM.*, vol. II, p. 363; cf. pp. 680 and 601, no. 1260 (LC I).

³ *Exc. in Cyp.*, p. 16, fig. 27, no. 1311 (tomb 74, which also contained the iron pin with ivory head); *Fibulae*, p. 54, fig. 24; *SCM.*, vol. II, p. 504, cf. pp. 580 and 599, no. 1290.

⁴ *Fibulae*, p. 55, figs. 25 and 26.

⁵ *Ibid.*, p. 73.

⁶ *Ibid.*, pp. 230 ff. In view of the large number of fibulae which have accrued in consequence of the excavations of the Swedish Cyprus Mission and others, it will be necessary to review some of Blinkenberg's more tentative conclusions. This, however, can only be done when the new fibulae are made the subject of a separate study, as the reproductions available do not permit of the examination of detail.

⁷ See *ibid.*, II, 2 g-i, 3 c-d, and II, 17 a-f.

neighbourhood of Curium¹ offer conclusive evidence of the use of fibulae and pins by women, which of course does not exclude their use by men as well. One contained the skeletons of two adult women; with the earlier deposition four fibulae were associated, of which one lay on the breast, presumably in its original position; the later had no fibulae, but two straight pins, one of bronze and one of bone, similarly placed. The second tomb, that of a young girl, contained two fibulae and a straight bronze pin whose upper end had an ivory casing. Both pins and fibulae continue to be associated with the graves of women throughout the Early Iron Age.

From the beginning of this period onwards Cypriot fibulae are on the whole of local types, which have a considerable diffusion in Palestine and Syria and even reach Nineveh.²

Except that by the nature of the other gifts it is fairly often possible to fix the sex of the owner, the Iron Age tombs of Cyprus tell us little more than those of the Bronze Age. If we take as typical the results of the Swedish excavation at Amathus, we find that out of 22 tombs of the relevant period (Cyp. Geom. I—Cyp. Archaic II) 13 contained one or more fibulae and 7 contained as well a single bronze pin. In Tomb 11 four fibulae and one pin were associated with one burial and only one fibula with another; three tombs contained a single fibula each. In these cases as it happens there is nothing to indicate sex, much less the manner of wear. That the Doric peplos never reached Cyprus is clear, and considering the isolation of Cyprus in what corresponds to the proto-Geometric period in Greece, not surprising. The fact that fibulae and pins are absent from a considerable number of graves and that these, owing to the practice of multiple burial, are unlikely to contain members of one sex only, suggests that costume was not uniform, which would be quite natural in an island of mixed population. Amathus is one of the places which seems to have retained a non-Greek population in historical times. In Cyprus as in Greece, fibulae disappear, but straight pins continue, though sparsely, into the Hellenistic period.³

APPENDIX

The problems respecting women's dress raised by the finds in the Kerameikos necessitate a review of Thiersch's account of early Greek dress,⁴ for, summary as

¹ Excavated by J. F. Daniel and published *AJ A.* xli (1937), pp. 56 ff.; see esp. p. 79, figs. 9 and 10. The sex of the two adults seems to have been determined on anatomical grounds; that of the immature skeleton (of which only a few scattered bones remained) by the similarity of the grave-gifts.

² Blinkenberg's assumption that all fibulae found in these regions come from Cyprus is improbable in the case of those types which (as he points out on p. 232) do not occur in Cyprus itself and are known in Asia Minor. Examples of these occur at Nineveh (*Fib.* xiii, 3 a and b), Carchimiah, and Deve Hüyük. The unmistakably Cypriot triangular form occurs at Nineveh and on a number of Syrian and Palestinian sites.

³ See, e.g., at Marion, *SCM.* ii, p. 397, tomb 72; *Cypro-classic*, p. 209, tomb 9, Hellenistic, and cf. *JHS.* ix (1888), pl. xi, pp. 222-3.

⁴ *Agina*, I, pp. 404 ff.

it is and published so long ago as 1906, it remains the latest comprehensive pronouncement on the subject. Like Studniczka, Thiersch maintained that women's dress in Homer and specifically Hera's was the peplos pinned on the shoulders, with the implication that pins were not used except in connexion with this ancient Hellenic dress and that in the eighth century the Ionic chiton was not yet worn by Ionians. That he held the primitive straight shoulder-pins to have persisted to the end of the fifth century does not of course directly concern the Homeric question, but as he relies for his evidence solely on representations in art and chiefly on those of Attic vase-painting, it is not irrelevant to attempt to check their relation to contemporary modes in dress.

The proto-Geometric graves of the Kerameikos have strikingly confirmed Thiersch's conclusion about the straight pin in an exceedingly remote period, but, as we have seen, those of the succeeding period withdraw from it all foundation from, say, 850 onwards in the only region of which we have detailed knowledge for the period. The only natural explanation of the disappearance of pins is a change of dress. Attica would hardly have taken to wooden pins in a period of technical advance and apparent prosperity; nor is there any evidence to support a conceivable alternative explanation that the dead ceased to be buried in their ordinary clothing. Solon's law,¹ which forbade the burial of more than three *ἡμέτια*, must have been directed against an established practice of including changes of raiment. The three items were presumably identical with those granted by Achilles to the corpse of Hector, tunic and two cloaks, and enumerated in the funerary law of Ioulis² in the island of Ceos as *στροῦμα*, *ἔνδυμα*, and *ἐπιβλημα*.

It would seem then that a dress which required no pins was adopted, and it is difficult to see what it can have been but the Ionic chiton.

Though the tale of the murder of the solitary Athenian survivor of some disastrous battle is probably authentic and, even if it is not, testifies to the general use in Attica of unprotected pins, it does nothing to date the change in fashion. A striking tale may well be shifted forwards from an immemorial past to a period of which something is known by tradition; if (a most improbable hypothesis) the incident was really the cause of the change of fashion, archaeological evidence would lead us to date it rather to the early Geometric age than to the early seventh century, the most probable date of the Aeginetan war.³ However this may be, the record of the Kerameikos offers unimpeachable evidence of a change in women's dress such as that described by Herodotus. A second appears to be recorded about the middle of the sixth century in the series of koral from the Acropolis, of whom only two wear the peplos; of these the later belongs to the decade 540-530.⁴ Both wear the Ionic chiton under the peplos, the earlier has over it the himation as well; this indicates that about the middle of the sixth century the chiton was a regular part of Attic dress, though worn in conjunction

¹ Plut. *Vit. Sol.* xxi.

² Ziehen, *Leges Sacrae*, 93 A, p. 260 *θῆ[τε] τοὺς θανάτους ἐν ἐμ[α]ντοῖς τριποῖ λευκοῖς*. The use of the word *ἡμέτια* makes it clear that garments are meant, though two of them could be used as sheets. The prescriptions of the Labyadae are less specific, stating only the maximum value of the clothing permitted and adding *τῆς δὲ παχέ[α]ς χλαῖνας φανερὰς εἶναι*. *Op. cit.* 74 C, p. 217.

³ See T. J. Dunlabin, *BSA*, xxxvii, pp. 88-90.

⁴ Payne, *Archaic Sculpture from the Acropolis*, p. 18.

with the peplos. Some kind of peplos fastening must therefore have remained in use till that date, and consequently presence of pins does not necessarily imply absence of chiton. Since Solon's funerary legislation must have applied to women as well as men, it follows that c. 600, and probably very much earlier, Attic women habitually wore at least two garments, which must have been either chiton and peplos or chiton and himation; and the further regulation¹ which forbade them to go out of doors wearing more than three suggests that the earlier equipment of the peplos kore (chiton, peplos, and himation) was not exceptional at that date.

The puzzle of the disappearance of metallic fastenings from the cemetery not later than 850 remains unsolved. That the peplos survived is obvious; after that later period of disfavour which sets in c. 550 it reappears in the fifth century, having doubtless been throughout the ordinary wear of the poor, fastened with wooden pins, and this may have been its fate for a time in the ninth century. How long it was in eclipse it is impossible to say; apparently it had been in favour again for some time before 550. The ivory brooch which secured the head-dress of the occupant of the Grave of Isis shows that even thus early a substitute for the bronze pin or fibula was available, one, moreover, which became fairly common in the seventh century. The fact that in spite of its wide diffusion² there are no other examples from Attica corroborates the conclusion that such fastenings were not needed there. A natural date for the revival of the native peplos would be the early part of the seventh century, when Athens apparently ceased for a time to be a naval and commercial power.³ In such a period of isolation and perhaps poverty wooden pins might possibly be used, or brooches, now common elsewhere. It may be remembered that in Mycenaean chamber-tombs metal pins are extremely rare and bone fairly common. As Greece had probably always produced linen, there is no reason to suppose that the chiton, if it had come in, went out again; but the clinging, pleated chiton which characterizes the korai may be something finer than Attica could then turn out.

Since Thiersch relies solely on representations in art to prove his case, it is worth while to scrutinize his examples and consider their relation to the dress of ordinary life. That the peplos is the regular dress of the divine and heroic beings with whom archaic vase-painting is principally occupied is true, but it may be traditional (as we found to be the case with the Boeotian shield in similar representations) rather than a reflection of contemporary modes. There is very little to distinguish peplos from chiton in early vase-painting. With the possibly unique exception of the 'Gorgon' on the Rhodian plate, the dress is to all appearance closed on both sides; in the earlier representations it has no apodygma, and when, as frequently happens, it is combined with the himation, the shoulder and upper arm are concealed. When they are not, the dress sometimes appears to have the short sleeves of the Ionic chiton.⁴ The fact that the himation is so common shows that at any rate large unprotected pins

¹ Plut., *Le.*

² Blinkenberg, *Fibules*, pp. 268-70, 272-3. Some of the types occur also in bone, pp. 264-7.

³ See T. J. Dunbabin, *loc. cit.*

⁴ e.g. on a black-figure Attic amphora a little earlier than 550 B.C. in Boston (Jacobsthal, *Ornamente*, pl. viii); unless, indeed, the sleeves are meant to indicate a chiton worn under the peplos.

were not being worn at the shoulders. Until in the second quarter of the sixth century we meet the unique and much quoted François vase, there is no representation of shoulder-fastenings. One criterion alone remains, that of material, which can sometimes be determined by pattern. An 'all-over' pattern, whether of the geometric type that lends itself to a simple weaving technique or elaborately figured, can only be a woven pattern in contrasting colours, and since as stated above there is no evidence and little probability that the Greeks ever dyed linen,¹ this implies that the material is wool.

Even when none of the criteria is present, the artist may still have thought of the dress as the peplos. It is probable that no absolutely certain example of the chiton in vase-painting exists earlier than its appearance in Attic black-figure about the middle of the sixth century, but a possible example on a Melian vase about half a century earlier has been noted (p. 359, Pl. XXXI, 1). This is about the date when we get our earliest evidence for the Ionic chiton from marble and bronze; while the amphora appears to be the earliest to depict a scene not obviously mythological.

The introduction of figure-weaving is undoubtedly to be ascribed to Oriental, perhaps Assyrian influence, whether operating directly or through Cyprus. That Eastern textiles were imported into Greece in the latter half of the eighth century is certain;² and it is quite possible that the offering to Athena of a figured peplos on the occasion of her four-yearly festival at Athens may go back to that date. Definite statements that the figures were woven are to be found in Plutarch³ and in the well-informed scholion on Eur. *Hec.* 467, as well as in the explicit language of the Chorus⁴ on which the scholion comments. The alternative of embroidery is therefore ruled out and the material must be assumed to be woollen. Since the peplos reached the Acropolis in the guise of a sail hoisted on a ship, it must have been an unshaped length of material; such a piece could always be draped round the shoulders of a standing statue, however encumbered by attributes, and secured by pins, fibulae, or brooches. Such, we need not doubt, was the peplos offered to Hera at Olympia.

As we have seen, the art of figure-weaving is mentioned by Homer. It is true that the offering of a great peplos, *παμπόδατος*, to Athena in *Z* is almost certainly an Athenian interpolation of the sixth century; but no suspicion attaches to the passage (*I* 125-7) in which Helen is described as weaving, for a human wearer, so far as we are told, a figured diplax. The subject of the design—the battles of the Achaeans and Trojans—is ambitious; whether Ionian looms could turn out such work in the eighth century we cannot tell. Andromache is

¹ It is true that in Tumulus III at Gordion there were found within the sarcophagus considerable remains of an exceedingly fine piece of linen with an inwoven stripe of a purplish colour (*Gordion*, pp. 16 and 233), but Körte's opinion that the piece, an article of clothing worn by the deceased, was an import from Phoenicia commands assent.

² *Perachora*, i, pp. 197-8.

³ *Vit. Demetr.* xii.

⁴ Why the captive women of Troy should imagine themselves performing a function which was in historical times reserved for Athenian women and girls of high rank is a mystery. Iphigeneia (*I.* in *T.* 223) is entitled to make the same supposition, for she is imagining herself the wife of an Athenian of her own rank. Possibly ancient robes preserved in temple treasuries gave rise to tales of Eastern women put to such tasks, like the Sidonians of *Z*, 280-90; they would show a strong oriental tinge and may have included actual specimens imported and dedicated in the orientalizing archaic period.

also described (X 441) as weaving a diplox; her pattern consisted of *θρόνα*, whose meaning is uncertain; the evidence on the whole favours the interpretation 'flowers'.¹

Figured peploi were no doubt in early days worn by the great, but to judge by the korai they had completely gone out so far as human wearers are concerned before the middle of the sixth century. The second of the peplos korai has indeed a decorative band near the edge of the overfall, but nothing more.

The female figures on some proto-Attic sherds in Athens² are too fragmentary to yield satisfactory evidence, but their dress is probably the peplos over which one at least wears the himation. On the remarkable proto-Attic plaque from the Agora³ the goddess is undoubtedly portrayed wearing the peplos; possibly she has a pith on her right shoulder. A himation appears to be draped diagonally over the left and to be belted in at the waist.

About the peploi of the François Moirai there is no possible doubt. The pins⁴ and the overfall are there, and though those of the figures to right and left have decorated borders only, that of the central figure is made up of horizontal strips of figure-pattern in which the griffin predominates. It has parallels on a sherd painted by the somewhat earlier artist Sophilos.⁵ A much earlier example, however, of a peplos with a figure-pattern is afforded by a terra-cotta from the temenos of Hera Limenia at Perachora⁶ which dates to the first quarter of the seventh century. The pins of the Moirai support chains loaded with heavy pendant ornaments. Such pins and suspended chains with ornaments are represented on a large number of seventh-century terra-cottas from the Argive Heraion and other sites. One pair of silver-gilt pins of seventh-century type with fragments of a gold chain and of the setting of a pendant ornament attached was found at Sparta, and a somewhat similar pair of the same period, at present unpublished, in a tomb near Knossos. Later examples are unknown. For the pins of the Moirai with their oval terminal bulb and three disks beneath it there does not seem to be any exact parallel *in corpore*; the nearest comes from a Mycenaean tomb in Cyprus.⁷ Studniczka's ingenious interpretation of them as fibulae of a type found in certain Etruscan tombs cannot possibly be main-

¹ Buschor (*Beitrag zur Geschichte der griechischen Textilkunst*, pp. 26 ff.) points out that floral ornament on dresses is not the first type to appear in Greek art, but Oriental originals must have preceded the first attempts of the Greeks to imitate, no doubt with adaptations, the new technique. Ancient authorities (Scholl. ad X 441 ABT, Schol. ad Theocr. ii, 59, and Hesychius) cite the Cypriots for the meaning *θρόνα* *lyria* or *δρόη* and say that *ἠδωκεν* in the sense of *embroider* is also Cypriot. *ἠδωκεν* is generally translated 'to embroider', but in Eur. *Her.* 470 and *I. in T.* 224 it is clearly used of weaving a pattern, quite apart from the fact that in both cases the Panathenaic peplos is referred to. It may well be that the other Greeks got their first lessons in the new art in Cyprus. The elaborate pieces ascribed to Helen and Andromache may glance at their Oriental domicile—Oriental at least in the eyes of the Greeks.

² *BSA.* xxv, pls. 48 b and 49 a.

³ *Hesperia*, ii (1932), figs. 72 and 73, pp. 604 ff.

⁴ i.e. in the case of the first and third; in each case only the pin on the right shoulder is visible. In the case of the third a chain with pendant ornaments connects the pair. A pair (both visible) is worn with connecting chain by Atalanta (*Gr. Vm.*, pl. 13) to fasten a chlamys draped like the apoxygma of a peplos. She wears a short chiton.

⁵ Grief, *Façon des Akropolis*, pl. xxvi; *MuZ.* 207.

⁶ *Perachora*, i, pl. lxxxvii, 4, p. 198. 4. The peplos is described as 'open on both sides'.

⁷ *Exc. in Cyp.*, pl. viii.

tained. The Moirai portray much that we know about Greek, though not specifically Attic, dress in the seventh century and do not agree with even the earliest of the korai, only ten or fifteen years later than their own date. There is no indication that they wear the chiton under the peplos.

As stated above, the position of the pins of the Moirai does not render reality, any more than does the neat semicircular shape of the lappet pulled over from the back of the garment, and the method of insertion is equally unreal. To pin on a blanket in the Dorian manner (in the simplest form of the peplos without apodygma to begin with) the prospective wearer folds it along the vertical seam which joins the two widths and puts it round her symmetrically, one width in front, one at the back, and the seam running down one side, say the left (cf. Fig. 56). She then takes on the right side two points, one front, one back, equidistant from the edge, pulls the back width forward so that at the point grasped it overlaps the front width, and then inserts the pin, head downwards, in the lappet brought over from the back. If it is to keep its position, it must pass four times

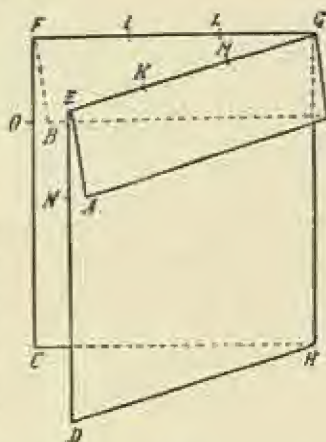


FIG. 56

through the stuff—in through the back lappet and front width, out through the front width and back lappet. The process is then repeated on the left shoulder. If there is an apodygma, the pin will pass eight times through the material—in through the doubled back lappet and front width and similarly out again. The strain on the material is of course considerable, and the apodygma probably started as a mere turnover of 3 or 4 inches to distribute it more widely. With either form of peplos the hold of the pins is excellent, and would probably be much the same if the pins were inserted head upwards. The reason for the head downwards position is that it is very difficult to insert the pin head upwards on oneself. That it is the natural position may be inferred from the fact that two toggle-pins found one on each shoulder of a skeleton in a grave of the necropolis of Vounous on the north coast of Cyprus had their points upwards.¹ There can obviously be no connexion between this grave, which dates to the second half of the third millennium, and the Kerameikos; in both the position is dictated by convenience. In this respect therefore the representation on the François vase is authentic, but the fastening is perfunctory, the pin being merely pushed in through the front width below the lappet and out again through the lappet. It does not look as if the artist had seen pins in daily use, for none so inserted could possibly hold. When we pass to the red-figure vase-painters, we find equally inaccurate renderings of the fastenings throughout (though the position at the level of the collar-bone is correctly given) and may also note that the wearers are almost invariably mythological beings. The list is as follows:

Mon. d. Inst. xi. 40 (Artemis).

Ibid. 40, 2 (Alcmena).

¹ *Antiquity*, xiv (1940), p. 204.

Gr. Vm., pl. 66, 2 (Eriphyle).

B.M. Cat. V. iii, pl. xii; *MuZ.* 513 (girl in company with Athena).

JHS. xi, pl. xi (Pandora). (Fig. 57.)

Gr. Vm., pls. 8 and 9 (Meidias hydria; Lipara and Chrysis).

Gr. Vm., pl. 30 (hydria with Judgement of Paris; Helen has pinned peplos).



FIG. 57

Gr. Vm. 170. Helen again appears with pinned peplos; she apparently has a globe-headed pin with a second, smaller globule which is pushed through the material and emerges from the lappet. This could easily be done with a loose weave and would give a very secure hold, which may have been the



FIG. 58

object of the globules and corrugations on the stems of seventh-century pins. Peitho on the same vase has an unmistakable fibula, an object hardly ever represented. The only red-figured vase-painting on Thiersch's list which can possibly be a scene of everyday life (Fig. 58) is that on a calyx krater in the Villa Giulia, and even here the dancing girls might be regarded as

nymphs (*Gr. Vm.*, pl. 17).¹ Some of the figures wear the peplos with pins point upwards; others who wear chiton and himation diagonally draped have the himation secured in the same way by a single pin on the right shoulder. The change from point upward to point downward, which latter position can be clearly seen on the Pandora vase, is probably due to the fact that tradition had been broken and no one remembered how peplos pins had really been worn. The point-downward position looks more natural and would be automatically used by a priestess pinning a peplos on a statue.

The use of metal pins for peploi, obsolete in most regions since c. 600 and in Attica from a much earlier date, was most probably preserved in memory by temple votives² and perhaps ceremonial. This is the likeliest source of the information about ancient Greek dress which Herodotus undoubtedly possessed. The Acropolis indeed could not help him, but in the country shrines of Attica which had escaped devastation by the Persians he may well have seen specimens of the ancient costume, and possibly in private houses others which had been handed down in great families.³ At Corinth and in the Argive Heraion he might see varieties of Dorian dress which enabled him to say that early Attic dress had specially resembled that of Corinth. His statement that the women of Argos and Aegina wore peplos pins in his own day must of course be accepted; we have already noted the precise if limited confirmation afforded by the discovery in Aegina of a sixth-century woman's grave which contained a pair of iron shoulder-pins.⁴ That this district of the Peloponnese should have adhered to ancient usage is curious, but cannot affect the conclusion that elsewhere it had ceased.

It seems a fair inference from the narrative of Herodotus that pins were not worn in Attica in his day; if they had been, there would have been a tale to explain why the women were allowed to resume their lethal weapons. Yet the peplos was in common wear, if we are to accept the evidence of toilet vases and others on which scenes of daily life are depicted.

We have seen above that as fasteners of the peplos pin and fibula had before 600 been superseded in most of the Greek world by the brooch, which at first appears in a variety of forms but in the fifth century is almost invariably round. Though not at first a favourite, it appears in bronze at Lindos⁵ and in both gold and ivory at Ephesus.⁶ It is rendered in paint on the shoulders of a Boeotian

¹ Two white lekythoi (*JHS.* xix (1899), pl. iii, p. 178, fig. 4; *Eph. Arch.*, 1886, pl. 4) are cited by Thiersch, but the lines which he interprets as pins are really folds. It is true that pins of elaborate workmanship are known which date to the late fourth century or to the Hellenistic age (e.g. a votive, third century, from the temple of Aphrodite at Paphos, *JHS.* ix (1888), pl. xi, pp. 222-3; *B.M. Cat. Jew.*, pl. xxxix, no. 1999, and a pin of the third or late fourth century, possibly from Thessaly, *AA.*, 1939, p. 226, fig. 7), but they can have nothing to do with the peplos. *V. infra*, p. 402, n. 10.

² See Dawkins, *AO.*, p. 383 and pl. ccii, 1. For pins linked by a chain with pendants cf. the third Moira on the François vase.

³ Travellers in the Balkans will remember the magnificent collections of Serbian costumes in the museums of Belgrade and Sarajevo; the former unfortunately suffered seriously from looting during enemy occupation from 1915 to 1918. The dresses had all been treasured family possessions for two or three generations at least. What the fate of either collection has been in the late war I have not been able to discover.

⁴ *AA.*, 1938, p. 496.

⁵ *Lindos*, pl. ix, 132.

⁶ *Exc. at Eph.*, pl. iv, 39; xxxii, 10 and 11.

terra-cotta representing a seated goddess,¹ and in the round on bronze mirror-handles of the fifth century.² In this last case Thiersch takes the brooches to be the heads of disk-headed pins; if they were, the shanks would pierce perpendicularly the shoulders beneath them, as does the small hole (also adduced in evidence by Thiersch) bored vertically into the shoulder of the 'Hebe' from the east pediment of the Parthenon. Two of the bronze peplos statues from Herculaneum have round brooches,³ and so has the Artemis of the Vatican and another at Lansdowne House.⁴ It cannot be argued that the evidence of these figures is unreliable because they are copies of Roman date; the bronze mirror-handles just cited were contemporaries of the originals. The cross-girt peplos of a little girl on an Attic gravestone has the girding secured on the right shoulder by a round brooch.⁵ A pair is worn by the archaic bronze figurine of a goddess in the British Museum.⁶ In red-figure vase-painting it is familiar as the fastening of the chlamys and is constantly worn by Apollo Citharoedus.⁷ As no other shape seems to have been in ordinary use, we are justified in identifying the round brooch with the *πέπλη* (distinguished by Pollux from *περόνη*)⁸ which was worn as we have seen (pp. 340-1) by men going out on active service and at a later date by professional soldiers,⁹ also by schoolboys until their admission to a gymnasium, and which, in gold, was sent by the Seleucids and, it may safely be inferred, by the Ptolemies to the *συγγεῖς τῶν βασιλέων*.¹⁰ In the fifth century there is less

¹ *B.M. Cat. Terr.*, B 50, pl. xvi, central figure.

² Langlotz, *Frühgriechische Bildhauerschulen*, pls. 15, 1; 16, 1 and 2; 18, 3; Beazley, *Proc. Royal Irish Academy*, xlv, Section C, no. 5, pl. xiii. This example is identical with Langlotz's 18, 3, and in Beazley's reproduction it is plain that the brooches are not round but lozenge-shaped. The brooches of Langlotz's 15, 1 do not appear to be round either.

³ Bieber, *Griechische Kleidung*, pl. vi, 2 and 3.

⁴ Bieber, *Entwicklungsgeschichte der griechischen Tracht*, pl. xx; Farnell, *Cults of the Greek States*, ii, pl. xxxiv.

⁵ Bieber, *Gr. Kleidung*, pl. v.

⁶ *B.M. Cat. Br.*, pl. ii, no. 188.

⁷ Bieber, *Gr. Kl.*, pl. xxxviii, 3; Gerhard, *AVB.*, pls. xxiv, 2, xxvii, xxx, lxxvi.

⁸ *Onom.* vii, 54.

⁹ Theocrit. xiv. 65-6, where the scholiast glosses the poet's *πεπορώσθαι* by *ἐμποροῦσθαι*.

¹⁰ A suggestion that this mark of honour (*πέπλη χρυσήν ὡς ἴδιος ἑαρί δίδουσαι τοῖς συγγεῖς τῶν βασιλέων*, 1 Macc. x. 89) was a straight pin lacks evidence. It is made in the *B.M. Cat. Jew.* apropos of a pin with a head of elaborate goldsmith's work found in the sanctuary of Aphrodite at Paphos (*JHS.* ix, pp. 222-3, pl. xi; *B.M. Cat. Jew.*, pl. xxxix, no. 1999, p. 223) which bears on its shank an inscription recording its dedication to the goddess by the wife of Aratos *ὁ συγγεῖς*, doubtless of the reigning Ptolemy. It may be noted first, that though it is probable to the verge of certainty that the badges of the *συγγεῖς* of the Ptolemies included a gold *πέπλη*, there is no record of the fact. The passage quoted above and a second recording the gift of the *πέπλη* with the rank of *τῶν πρώτων φίλων*, 1 Macc. xi. 58 = Joseph. *Ant.* xiii. 140 both refer to Seleucids. Granting, however, as we safely may, that the insignia of the *συγγεῖς* of the Ptolemies (for which see *Archiv für Papyrusforschung*, i, pp. 219 ff.) included a *πέπλη*, what has it to do with the votive dedicated by a woman who would naturally mention her husband's high rank, but would hardly be allowed to appropriate his decoration? There is no reason to think that the pin is anything but a woman's ornament such as might be worn in an elaborate coiffure or head-veil. This view derives support from the fact that all the mentions of gold and silver-gilt *περόναι* in Delian inscriptions of Ptolemaic date occur in inventories of the treasury of the Artemision; see, e.g., *Inscr. Gr.* xi. 2, p. 58, line 33; p. 59, line 50. Iron and bronze fibulae mentioned in other inscriptions of the same group (e.g. *Inscr. de Délos*, no. 298, p. 45, l. 179; no. 320, p. 90, ll. 66-7) are not votives; they are mentioned only in connexion with buildings and are rivets, a sense of the word known from technical writers. I owe this reference to Dr. Jacobsthal.

evidence of its use by women; but in addition to the mirror-handles mentioned above instances are by no means lacking in vase-painting, though fastenings are generally omitted altogether. On red-figured vases round brooches are sometimes shown securing both peplos and himation; they are generally much smaller than the men's brooches. Examples are:

Figure of Tragedy, Gerhard, *AV.*, pl. 56, 2; peplos.

Nereid with shawl, op. cit., pl. lxxxii; Langlotz, *GV. Würzburg*, pl. 186.

Eudaimonia, Hall, *Winckelmann. Progr.* 1880, with plate; peplos.

Hera and Athena in Judgement of Paris on Kertch hydria from Alexandria, *Gr.Vm.* i, p. 204, pl. 40; *MuZ.* 598; peploi.

BARV., p. 834, Squat Lekythoi, no. 2; woman wearing peplos.

For later examples see *Gr.Vm.*, pls. 20, 68, 2, 79, 1, 145.

Large brooches were worn with Hellenistic dress; the Muse of Comedy in the Vatican wears over her chiton the attenuated, high-girt, Hellenistic version of the peplos fastened with very large specimens.¹ Such, we may conjecture, was the *περονάτρίς* or *ἐμπερόναμα* of Praxinoa (Theocr. xv. 21 and 34). It is doubtless to this fashion that Schol. A on *Σ* 180 refers. Two rather elaborate gold embossed brooches of Hellenistic date are in the B.M. (*Cat. Jew.* 2062 and 2063).

Of the scanty evidence it has been possible to adduce only that of sculpture would be available to Alexandrian scholars, together with temple votives (of which few extant in their day would go back to the archaic period)² and, if they chose to consult them, temple inventories. As none of these sources was available in Egypt, the study would involve an amount of travel hardly likely to be undertaken; and without such investigation they would have to base their interpretation of Homeric dress on the scanty literary evidence available and on contemporary usage.

The following are the principal passages bearing on Homeric dress in the Scholia and other sources:

Ω 229

Schol. A. πέπλος, φᾶρος, χιτῶν, χλαῖνα διαφέρουσι· πέπλοι γὰρ οὗς περονῶνται μόναι γυναῖκες, οἱ καὶ ἑανοὶ καλοῦνται· χιτῶν δὲ ἀνδρείον ἐνδυμα, φᾶρος ἱμάτιον, χλαῖνα τὸ περίβλημα. (A second schol. in the same MS. adds to the last word τῆς κλύης, which is obviously essential to the sense.)

Eustathius ad loc. 1347. 31. πέπλοι δὲ γυναικείον φόρημα κατὰ τοὺς παλαιούς ᾧ (sic) ἐπερονῶντο αἱ γυναῖκες, οἱ καὶ ἑανοὶ ἐκαλοῦντο, δῆλον δὲ ὅτι καὶ ἐπ' ἄρραφοὺς ὑφάσματος ἢ λέξις ἐλαμβάνετό ποτε, ἐτυμολογουμένη παρὰ τὸ διαπεπτάσθαι τοιοῦτος γοῖν πέπλος δοκεῖ καὶ ἐν Ὀδυσσεΐᾳ τῷ Τηλεμάχῳ παρὰ τῆς Ἑλένης δεδούσθαι καὶ τῇ Τρωϊκῇ Ἀθηνᾷ ὁμοίως ἐν γούνασι τεθῆναι, ὥς δὲ καὶ ταῦτόν τι πέπλος καὶ ἑανός παραδηλοῦται ἀπὸ τοῦ ἐς φυάλην χρυσὴν τὰ τοῦ Πατρόκλου ὅττ' αὖ τεθῆντα ἐανῶ λεγὶ καλεῖσθαι. ὁμοίως δὲ καὶ τὰ τοῦ Ἑκτορος πορφυρέοις πέπλοις ἐν τοῖς ἔξῃς καταθέντα εἰς χρυσὴν λάρνακα.

¹ Bieber, *Entwickl.*, pl. xxiv.

² It is sufficient to mention besides the destruction by fire of the temples of Athens by the Persians, that of the Argive Heraion by fire in the fifth century, and that of Athana Lindia in the fourth, besides the spoliation of Delphi. Moreover, all temples were cleared from time to time of antiquated votives, and textiles would have least chance of survival.

E 734

Schol. A. πέπλον γυναικείον ἔνδυμα, τοιούτεσι χιτῶνα ὃν οὐκ ἐνεδύοντο ἀλλ' ἐπερονῶντο· ἀρθρῶν γὰρ τῶν περονῶν καταρρέων φαίνεται ὁ πέπλος εἰς τὸ εὐαφός.

Schol. B. τὸ δὲ κατέχευεν ἀντὶ τοῦ τὰς περόνας λύσασα καταφέρεισθαι ἀφήκε· γυμνὴν δὲ ἡμῖν τὴν Ἀθηναίαν διὰ τῆς λέξεως παρέστησεν.

Σ 178

Schol. A. ἰανὸν ἑσθ' ὅτι ἑωὸς ὁ αὐτὸς τῷ πέπλῳ καὶ καθόλου πρὸς τὸν στολισμὸν.

Schol. Γ. παρονομασία ἐτυμολογική· δηλοῖ γὰρ τὸν ἐνδυτήριον πέπλον.

Σ 180

Schol. A. ὅτι κατὰ τὸ στήθος ἐπερονῶντο, οὐχ ὥς ἡμεῖς κατὰ τὴν κατακλείδα τοῦ ὤμου.

Pollux vii. 54. ὃ δὲ σχιστὸς χιτῶν περόνας κατὰ τοὺς ὤμους διεῖρτο καὶ πόρπη κατὰ τὰ στήθια ἐνήπτο· ἐκαλεῖτο δὲ καὶ ὁ τῶν παρθένων οὗτω χιτωρύσκος, οὗ παραλύσαντες ἄχρι τινὸς τὰς πτέρυγας ἐκ τῆς κάτω πέλξης παρέφαινοι τοὺς μηρούς, μάλιστα αἱ Σπαρτιάτιδες, ἀς διὰ τοῦτο φαινομηρίδας ὠνόμαζον.

Hesychius, σχιστὸς· χιτῶν τις ποιὸς γυναικεῖος κατὰ τὸ στήθος πόρπη συνεχόμενος.

Photius. σχιστὸς χιτῶν· κατὰ τὸ μέσον πόρπη συνεχόμενος.

σ 292

Eustathius.¹ πέπλον δὲ φασὶ τινὲς τὸν ἐνταῦθα μέγαν καὶ περικαλλέα καὶ ποικίλον περιβόλαιον ὃν σκέπον τὸν ἀριστερόν ὤμον, καὶ ἔμπροσθεν καὶ ὀπισθεν συνάγων τὰς δύο πτέρυγας εἰς τὴν δεξιὰν πλευράν, γυμνὴν ἑὼν τὴν δεξιὰν χεῖρα καὶ τὸν ὤμον· εἰ δὲ τοῦθ' οὕτως ἔχει, τί δὴ ποτε δώδεκα περόνας ἔχρην ἔχειν αὐτὸν μανδυοισιδῆ ὄντα; δοκεῖ δὴ μάλιστα γυναικεῖον ἱμάτιον εἶναι κατὰ τὰ Δωρικὰ, σχιστὸν ἐπὶ μόνῃ τὰ ἔμπροσθεν καὶ διὰ τοῦτο περόνας ἰθὺλον πολλάς.

Scholl. BQ. περικαλλέα πέπλον) περιβόλαιον τὸ σκέπον τὸν ἀριστερόν ὤμον, ὀπισθεν καὶ ἔμπροσθεν συνάγων τὰς δύο πτέρυγας εἰς τὴν δεξιὰν πλευράν, γυμνὴν ἑὼν τὴν δεξιὰν χεῖρα καὶ τὸν ὤμον.

It is evident that the Homeric scholia embody elements of a common source or sources, whether these were separate monographs on Homeric or ancient Greek dress, or ὑπομήματα of a more comprehensive character.

Eustathius contains some of the same elements, to which he adds speculation of his own. In the first passage quoted above from his commentary on the *Iliad* his reason for assuming (no doubt correctly) that the peplos given to Telemachus for his future bride and that laid on the knees of Athena of Ilion were ἀρραφείς with the implication that that offered to Penelope was 'made up' is wholly obscure. In his comment on σ 292 he draws from ancient sources the information which he shares with Scholl. BQ and gives an accurate description of the dress which the so-called 'Spartan Girl Runner' of the Vatican has made familiar to us. Then he launches into conjecture. This is the only extant text in which an ancient commentator explicitly compares women's dress in Homer with the Doric, and he shows at once that he has no understanding of the latter. He

¹ Despite the corrupt condition of the text (cited from Stallbaum's reprint *ad fidem exempli Romani*) this passage is adduced because of the importance attached to it by earlier scholars.

knew, presumably from Herodotus, that pins were an essential part of it, and that is the whole of his information.

The Scholiast on *E* 734 shows the knowledge which Eustathius lacks; Alexandrian scholars, as has been shown above, must have been familiar with a refined version of the peplos, worn over a chiton. He calls attention to the fact that Athena had nothing under hers.

Schol. A on *S* 180 should dispose of the notion that *κατὰ στῆθος* could ever convey to a Greek the meaning 'on the shoulders'.

The passage from Pollux is of interest as the only ancient text in which *περόνη* and *πόρπη* are distinguished. The verb *ἐνῆπτο* is obviously appropriate to fibula or brooch; as has been argued above, *πόρπη* used by a Hellenistic writer (and the sources of Pollux cannot well have been earlier) would almost certainly denote the round brooch. The first of the two dresses which he describes appears to be imaginary.

Though the term *σχιστός χιτῶν* does not occur in extant Greek literature, the fact that it is explained by the lexicographers shows that it had been current at some period and, since Pollux gives two meanings, in contexts which gave rise to comment and discussion. The second of the definitions of Pollux applies to the familiar case of the Spartan girl's open dress, a description of which might well occur in fifth-century tragedy (to which, in fact, we owe our chief fifth-century allusions to it) or in comedy. If that were so, *σχιστός χιτῶν* would naturally figure in either the *τραγικὴ* or the *κωμικὴ λέξις* of Didymus. On the source of the first definition we can only speculate, since we have no archaeological evidence for the dress which it describes. Supposing it to be derived from the *τραγικὴ λέξις* it might represent an attempt to reconcile the straight pins of Iokaste with the *περονίς* of Deianeira,¹ apparently placed at the centre of the breast. It is even conceivable that Hera's *ἐνάος* was brought into the discussion. In any case the statement can be based only on the interpretation of texts, not on archaeological observation or tradition.

The entries of Hesychius and Photius appear to give an explanation of a line quoted by Ammonius from the comic poet Apollodorus,² and may well be ultimately derived from the *κωμικὴ λέξις*. See Meineke, *FCG.* iv, p. 453.

¹ *Tr.* 925.

² *σχιστός χιτωνάκων τίς ἐνδεδυκας;*

CHAPTER VII

THE HOMERIC HOUSE

I. HOUSE AND PALACE

THE climax of the *Odyssey* is the slaying of the Suitors, and this, owing to their superior numbers, can be achieved only in one way: they must be trapped in a room with only one practicable exit by the hero armed with a bow. This is the original simple story (for the Spear-fight which in our *Odyssey* succeeds the Bow-fight is plainly an addition, made no doubt by Homer himself, to the original tale),¹ and it could have been played out in the great megaron of Troy II with its forecourt, its porch, and its central hearth. This ancient form of house had established itself, as we now know, in mainland Greece in the Middle Helladic period, in Boeotia,² and doubtless elsewhere. In the Third Late Helladic period it was a common, perhaps the dominant form, since apart from the palaces of Mycenae and Tiryns, of which it is the essential feature, it has been found with slight variations at Korakou,³ at Tiryns itself outside the citadel,⁴ and on the island of Melos,⁵ while some of its essential characteristics are preserved in the late palace at Gha,⁶ where the abnormal plan is due to the peculiar character of the site. Further, it survived in that form of temple which at an early date became canonical.

For the action of our *Odyssey* something more complicated is required. There must be a number of adjacent buildings, all included within the *ἔρκος* of the *αἶλη* and having communication with the outer world only through its gates.⁷ There must be accommodation for a king and queen (Laertes and Antikleia), for a married son, since Odysseus built himself a thalamos round an olive-tree in the courtyard, and for a grown-up but unmarried son, since Telemachus does not use the thalamos of his father. The palace must further house Eurykleia and the fifty maid-servants under her; the only menservants of whom we hear are the herald Medon and the bard Phemios,⁸ for the henchmen of Odysseus had followed him to

¹ See Munro, *Od.* xiii-xvii, pp. 304-7.

² See Goldman, *Eutresis*, p. 37, fig. 42. Cf. p. 35, figs. 37 and 39, and Blegen, *Korakou*, p. 77, fig. 110, which show a megaron house with an apsidal termination. For the early history of the megaron and for Early Helladic examples of rooms which have many of the characteristics of the MH megaron see E. Baldwin Smith, 'The Megaron and its Roof', *AJA.* xvi (1942), pp. 99 ff.

³ Blegen, *l.c.*, p. 81, fig. 112; and p. 94, fig. 123.

⁴ *Tiryns*, iii, p. 197.

⁵ *Excavations at Phylakopi*, BSA., Supp. 4, pp. 55-7, fig. 49. It may be noticed that the 'but and ben' type of house is familiar at Phylakopi in period II, that in which the importation of 'Minyan' ware becomes copious; see p. 44, fig. 32. Possibly a settlement from central Greece may have accompanied the development of trade, and the megaron of period III may be a genuinely local product. At Zygouries, however, we find rectangular 'but and ben' houses of the Early Helladic period; see Blegen, *Zygouries*, pp. 6-8, figs. 5 and 7.

⁶ Frazer, *Pausanias*, v, pp. 120 ff., figs. 6 and 7; Bassett, 'The Palace of Odysseus', *AJA.*, 1919, p. 292, fig. 3.

⁷ This is implied by Melanthios, *x* 136-8 and confirmed by *I* 475-6.

⁸ The *σφοδρὸν* and *θεράποντες* of a 109-12 are the followers of the Suitors.

Troy, but there must have been lodging for them. The palace must also have had an adequate number of store-rooms and in part at least an upper story, since Penelope's bedroom, though not her sitting-room, is upstairs. The main features of the building as seen from a distance are thus described by Odysseus:

ἐξ ἑτέρων ἑτέρ' ἔστιν, ἐπὶ μακρῇ δὲ οἱ αὐλή
τοίχῳ καὶ θρυγκοῖσι, θύραι δ' εὐερκέες εἰσὶ
δικλίδες (p 266-8)

and no better succinct description could be given of the restored palace of Tiryns.

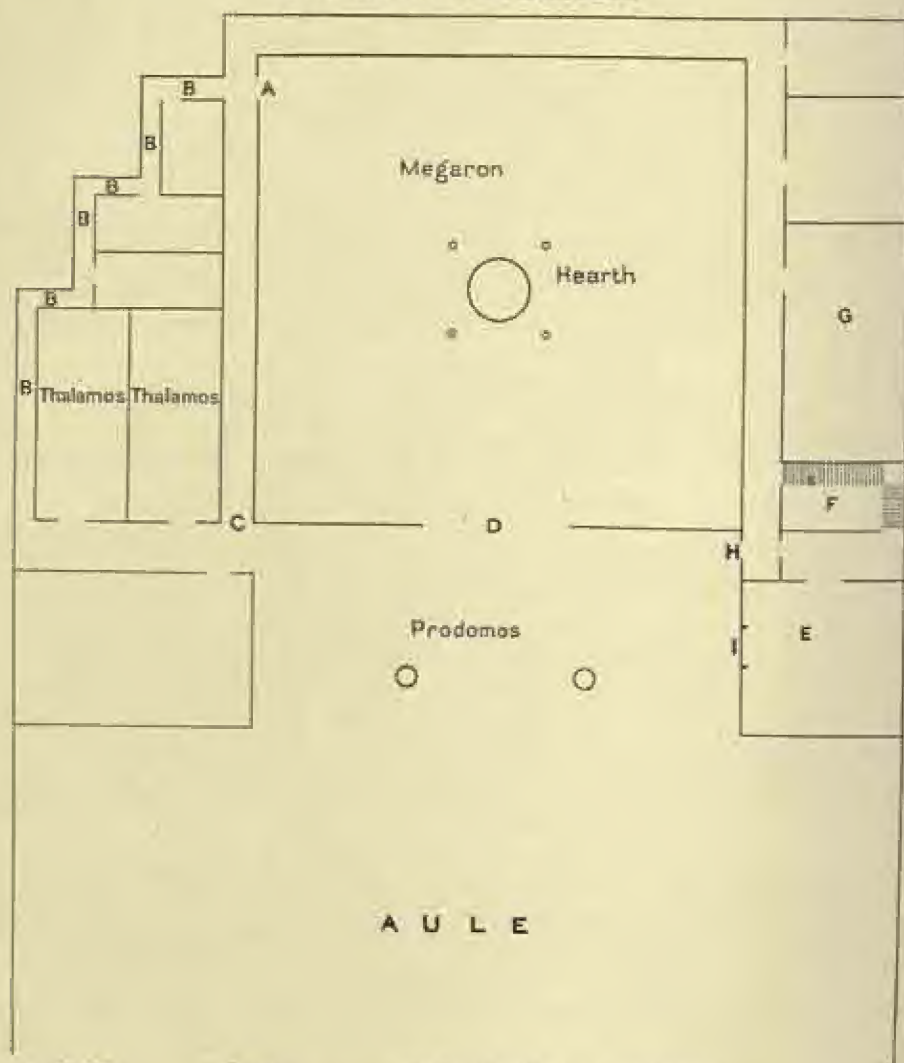
Buildings combining these characteristics are known in Greece at one period and one only, that known as Late Helladic III, and that is the period within which the action of the *Odyssey* is supposed to fall. Such a degree of coincidence can hardly be fortuitous, and it is now generally agreed that some connexion, however enigmatic, exists between the house of Odysseus and the Late Mycenaean palace. This unanimity, however, was not reached in a day. Schliemann, whose *Tiryns* appeared in 1886, and his young colleague Dörpfeld naturally emphasized the more obvious Homeric features of the building which they had uncovered, but it was not till 1900 that the data of the poem and the data of the excavation were systematically scrutinized and compared. This was the work of Myres in an article 'On the Plan of the Homeric House',¹ which superseded all earlier discussions of the subject. In it the writer established, besides much else, a point of capital importance in the interpretation of the text—viz. that in Homer verbs of motion compounded with ἀνά indicate progress from the inside of a room or building towards the exit, and those compounded with κατά movement in the opposite direction, and thus was able to give for the first time a coherent account of the movements of the dramatis personae within the palace. Acceptance of the plan of Tiryns (Fig. 60) as the basis of the interpretation of the *Odyssey* involved placing the two thresholds, that of ash-wood and that of stone, at the outer end of the megaron, whatever their precise relation to each other might be.

The extent to which the action of the *Odyssey* can be adapted to the stage of Tiryns must not, however, blind us to the extreme difficulty of accounting for the knowledge which the poet apparently possessed of architecture of the LH III type. Within a century of the destruction of Troy VII a early in the twelfth century came the fall of the Achaean power in Greece; Mycenae was destroyed, Tiryns ceased to exist as a single great mansion, the occupation of Gha in Boeotia and Phylakopi in Melos was not prolonged into the succeeding age, and that of Rhodes (Ialysos) did not last beyond the sub-Mycenaean period. The apparent gap of some centuries between the Mycenaean and the Hellenic settlements in Anatolia has been alluded to more than once; yet it was to all appearance precisely in

¹ *JHS.* xx (1900), pp. 128 ff.

this period and on the Anatolian side of the Aegæan that the tale of the Bow-fight must have originated. As has been set forth in the chapter on

THE HOUSE OF ODYSSEUS



- A *προσθήκη* B *βώγες* C *ὄδὸς ἐς λαίρην = στόμα λαίρης*
 D *λαῖνος οὐδός* E Penelope's megaron with *ἐπέρων* above F *κλίμαξ*
 G Sleeping quarters of women slaves H door into prodromos I window opening
 on to prodromos.

FIG. 59

the Bow, only there can the Greeks have acquired knowledge of the formidable composite variety used by Odysseus; and if they did not attain it before the Geometric age, how was the knowledge of the LH III type of

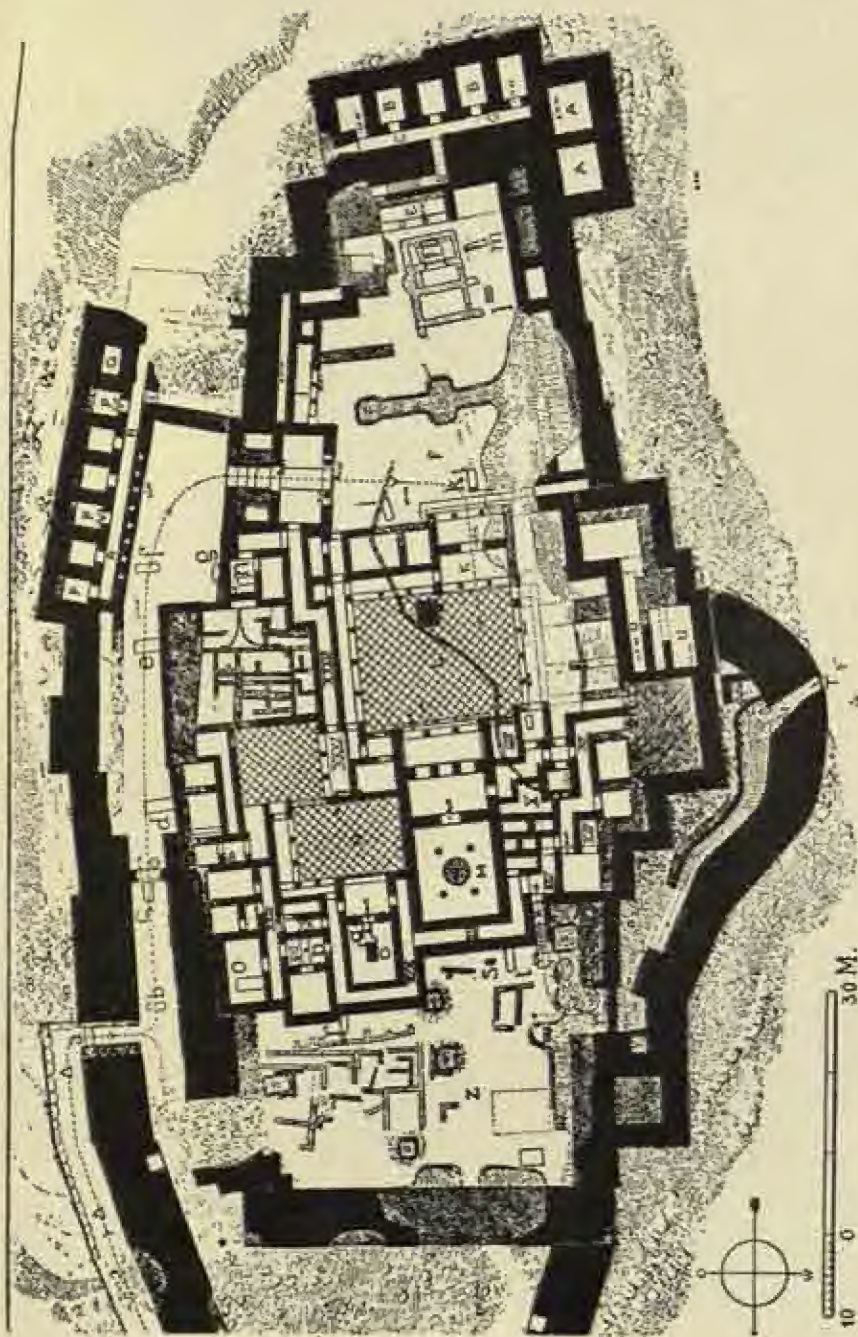


Fig. 66

palace preserved? It is true that a very simple type of megaron house would satisfy the needs of the Bow-fight, in which Odysseus and Penelope, acting in concert throughout, may have outwitted the Suitors without assistance; in that case Penelope and her maids were doubtless wont to spend the night bolted and barred in the megaron after the Suitors had gone home. In just such houses the earliest Ionian settlers probably

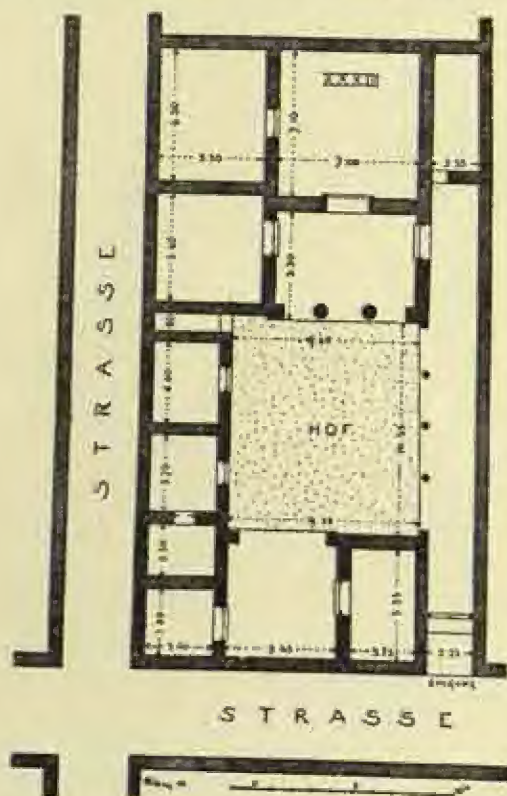


FIG. 61

lived, since there is evidence of the existence of such dwellings on the shores of the Corinthian Gulf, in the Argolid, and at Athens in the eighth century, and they had not been wholly forgotten in Samos even in the sixth;¹ they may also have found them in their new country, where there is plenty of evidence for the intrusion from south-east Europe of the thatched and gabled house.² Such considerations, however, do not explain the double mystery: how comes the good upper-class house of Priene (Fig. 61) in the

¹ See p. 418 *infra* and n. 1 on p. 419.

² See Baldwin-Smith, *op. cit.*, pp. 197 ff. The façades of the rock-cut tombs of Lykia bear witness to the type of the domestic architecture, whether contemporary or not, and the houses of Sardis had thatched roofs in the days of the Ionian revolt (Herod. v, 10).

fourth century to embody so many features of the LH III palace,¹ and why does an innovation in the house (the orsothyre, if we may so describe the secondary exit from the 'megaron') appear in Homer's version of the ancient plan? The riddle would be solved if sites should be discovered in Ionia on which the culture of LH III or rather a direct descendant of it survived into the Geometric age, and a continuous tradition in building was thus maintained. Pending systematic excavation on the west coast of Anatolia, the question must be left in suspense.² In mainland Greece it may be that a few examples of the great house of the Bronze Age preserved the tradition, e.g. the strong house of Erechtheus at Athens and that of Kadmos at Thebes; they may have been occupied as dwelling-houses as long as the kingship lasted.

Though important points in the interpretation of Homer had been established by Myres, other questions invited further discussion and especially that of the women's quarters. Schliemann had identified them with the Little Megaron at Tiryns; Myres was inclined to place them opposite to the Great Megaron on the other side of the court, where both at Tiryns and Mycenae a couple of rooms are situated.

The orsothyre also presented a problem. That it was a secondary exit from the hall was plain; but was it or was it not identical with the *ὄδος ἐς λαύρην*? These and other points were worked out in detail by S. E. Bassett in a valuable article entitled 'The Palace of Odysseus'.³ For the women's quarters he fixed on the third of the positions possible according to the plan of Tiryns, viz. at the side of the megaron, and placed them as near as possible to one of its front corners. A careful study of the positions of the characters within the hall at various points in the story enabled him to fix the orsothyre, which may be taken to be in one of the side-walls of the megaron, as near as possible to the back; the *ὄδος ἐς λαύρην* he identified with the *στροφή λαύρης* near the main door of the megaron, the exit from a long passage to which the orsothyre gave access, though on Bassett's view not directly.⁴

¹ See D. S. Robertson, *Greek and Roman Architecture* (from fig. 124 in which fig. 61 *supra* is reproduced), p. 298, and *infra*, p. 416 and n. 8, p. 424.

² At present what scanty evidence exists is in favour of a complete breach of continuity. Boeckh's attempt (in *Aus ionischen und italischen Nekropolen*) to derive some of the motives in the decoration of Ionian vase fabrics from Mycenaean originals must be held to have failed.

³ *A.J.A.* xxiii (1919), pp. 288 ff.

⁴ In these conclusions Bassett had been to some extent anticipated by Dickins, who put forward somewhat similar views in an article published in *JHS.* xxiii (1903), pp. 325 ff. Bassett's article, however, with which the present writer is in almost complete agreement, contains much fresh matter and is worked out in much greater detail. Reference should also be made to an article by E. A. Gardner, 'The Greek House', *JHS.* xxi (1901), pp. 203 ff., which did much to advance the Mycenaean theory by showing that the current view of the Greek house, on which the conventional plan of the Homeric house was based, was itself in several important respects a misinterpretation of the description of it given by Vitruvius. By this disclosure, combined with its own stark improbabilities the conventional plan, of which Jebb was the latest supporter, was finally discredited. We are virtually ignorant of the domestic architecture of Greece not only in the Dark Age and the archaic period, but throughout the fifth century, and we know little about that of the fourth until near its close. At this point excavation begins to

The complex plan of Tiryns, to which the plural forms—*δῶματα*, *δομοί*, *μέγαρα*, *οἰκία*—so constantly applied in the poem to the house of Odysseus are completely appropriate, is not the outcome of a natural development of the Middle Helladic megaron. As the ruins of Tiryns and the scantier vestiges of Mycenae show, the architecture of the mainland had been profoundly influenced by the labyrinthine palaces of Minoan Crete.¹ Yet the mainland palaces, or rather those of Tiryns, of which alone we have adequate knowledge, are in no sense copies of the Cretan plan. Not only are essentially mainland features preserved in the isolation and dominance of the megaron and the position of the *αὐλή* in front of it, but, like the megaron, all the subsidiary rooms are either isolated or grouped in pairs on the 'but and ben' principle; i.e. the second can be entered only from the first. Thus at Tiryns we have beyond the *λαύρη* immediately east of the Little Megaron a small megaron and anteroom (XXII and XXI),² with the foundations of a staircase (XX), to the south. Through the anteroom there is access to another *λαύρη* (XXIII), which in turn admits to a large single room (XXIV), to a very small megaron with anteroom (XXV), and to XXVI, a megaron to which the dead end of the *λαύρη* (XXIII) forms a sort of anteroom. West of the Great Megaron, whose *λαύρη* has been in part suppressed by the encroachment of the subsidiary buildings, we have a similar complex of suites and single rooms. A zigzag passage (IX) leads from the vestibule of the megaron past the bathroom, whose sole entrance faces west, to a suite of considerable dignity (XII A), which is situated immediately across a narrow passage. While the bathroom could be easily reached from the *αὐλή* or megaron, it is plain from its position that the convenience of the occupants of XII A was the first consideration, while even the secondary rooms XIII or XIII A had readier access to it than had the Great Megaron.

show that in the Hellenistic age house-plans varied greatly, as might be expected. Noack's pamphlet *Homerische Paläste* (1903) traced the early history of the megaron so far as known at that date and in its valuable second part showed the type of society which it implied. His conclusion was that the palace of Tiryns was too complicated to equate with those of Homer.

Since Crete lies outside the scope of this discussion, there is no need to do more than name the articles in which Dörpfeld embodied his premature and, as it proved, untenable conclusions about Achaean palaces in Crete (*AM.* xxx (1905), pp. 257 ff.; xxxii, pp. 576 ff.). D. Mackenzie's 'Cretan Palaces and the Aegean Civilization' (*BSA.* xi, pp. 181 ff., and xii, pp. 216 ff.), written as a rejoinder to the first of Dörpfeld's articles, and Noack's *Ovulhaus u. Palast in Kreta* (1908) which summed up the controversy, are alike irrelevant to the theme of this chapter.

¹ Specific instances of Cretan influence may be seen at Mycenae in the north-west portal (see *BSA.* xxv, pp. 212-13) and in the use of gypsum slabs, which may be imports from Crete (op. cit., pp. 232-3 and 392); at Tiryns in the alabaster dado, an almost certain Cretan import so far at least as the material is concerned, and on both sites in the free use of the wooden column, in its downward tapering Cretan form, if the evidence of various frescoes may be trusted, and in the practice of fresco-painting, its style, and some of its subjects.

² The numbers are those of the plan which forms plate i of *Tiryns*, iii, to which reference should be made whenever possible. Most of the rooms can be easily identified on earlier plans, e.g. that in Schuchhardt, *Schliemann's Excavations*; but in these foundation-walls are not distinguished from the sites of vanished wooden thresholds and consequently 'suites' cannot be determined nor, as a rule, the position of doorways fixed.

From XII A a second zigzag passage leads past XIII (the smaller two-room suite), and XIII A, a single room, first to the side and then to the back of the Great Megaron, conducting ultimately to the *αὐλή* of the Little Megaron (XVI). Between the first part of this passage and the west wall of the Great Megaron lie a small court through which passed the drain for the bath-water and the foundations of a staircase. Everything suggests that we have here the domestic quarter of the palace and the private apartments of its most distinguished occupants. The Little Megaron is too inaccessible from the larger one to serve this purpose. It is hardly credible that to reach her own rooms the queen of Tiryns had to go out of the megaron past the bathroom and along the series of passages whose devious courses we have traced—unless indeed she preferred to go outside altogether, through the great court and forecourt, and use the outer approach from the Great Propylaia. Further, the recent excavations of the German Institute have proved with virtual certainty that the Little Megaron, though not built before the Third Late Helladic period, is older than the Great Megaron, which must have superseded it as the residence of the king.¹ The Little Megaron, though it interfered with the proper development of the new palace, was sedulously preserved, and no doubt became the residence of someone very closely associated with the king, perhaps the crown-prince or the queen-mother. We have two independent palaces built, roughly speaking, on the same plan, and either may furnish a hint for our reading of the house of Odysseus.

The situation on the south side of the court² is equally unsuitable for the queen's apartments. It is too remote and too exposed; moreover, as we are considering the special case of Penelope, we may note that from this position she could not have heard or seen as much of the doings in the hall as she is supposed to do. As in the case of the Little Megaron, further excavation, though on another site, has increased our knowledge. At Mycenae a similar position is occupied by the throne-room (as it is judged to be from the sunk rectangle adjoining the north wall), to which access from without is given by an anteroom.³ This in its turn is approached by the final landing of the Grand Staircase which formed the state entrance to the palace. Here the king, having himself reached the room by a door from the *αὐλή*, could give audience to foreign envoys or to any visitors whom he did not wish to admit to the more private part of the house. The corresponding rooms at Tiryns may have been less stately; their

¹ *Tiryns*, iii, chs. 29 and 30.

² The walls in this region are exceedingly ruinous, but their restoration seems to be well founded. The quarter west of the great court is too completely ruined to admit of reconstruction. Unlike the buildings of the forecourt, it lies *ἔκτος ἐνδοῦ*, and may have contained store-rooms and lodgings for servants. The buildings south of the forecourt are also undecipherable, but included two courts, from which we may perhaps infer two more or less independent blocks, in which palace officials and men-at-arms may have had their quarters.

³ *BSA*, xxv, pp. 179 ff. and 186 ff. Note the similar rectangle which abuts on the east wall of the Great Megaron at Tiryns, just opposite the central hearth (not reproduced in Fig. 60).

condition is too ruinous to admit of reconstruction. Only the foundation walls remain, so that we know nothing of the floors or even the position of the doors; owing to the difference of level, however, the German excavators are convinced that they must have communicated with the outer and not with the inner court. The rooms seem more than would be required for the accommodation of the doorkeeper, and we may fairly infer that they were used for transacting business with people whom it was not intended to admit to the *αἶθρῃ* or megaron. We have therefore no instance of any residential part of the palace, much less the queen's apartments, being situated on the side of the court opposite to the megaron.

It remains therefore to consider in greater detail the third position, that beside the megaron, at Tiryns on the west of the Great and the east of the Little Megaron, in both of which places¹ we have already found the constituents indispensable to Penelope's quarters, viz. a room which can fairly be called a megaron and a staircase which may have given access to a *ὑπερώιον*.² If in the wing east of the Little Megaron we suppress the southern part of the *λαϊρή*, and put the staircase north of XXI and XXII, and XXII south of XXI, we should have Penelope's megaron, which we know to have been on the ground-floor, in the desired position,³ having a common wall with the porch of the main megaron. Through a window or door giving on the porch she could hear much of what went on in the hall,⁴ and see anything that happened near its door. Each of our three megara (that of Mycenae and the Great and the Little at Tiryns) has in fact a door opening out of either the porch or the vestibule. By it Penelope would reach the stone threshold when she visits⁵ the principal megaron. Sitting at a window she could hear Telemachus sneeze and could watch the proceedings of Antinous, who, as Bassett has demonstrated, has his place by the door. Conversely, Odysseus, lying in the *prodomos*, could hear the curse of a woman grinding corn in one of the rooms of Penelope's quarters. From her upper chamber, which may be supposed to have had a window looking (to speak in terms of the plan of Tiryns) to the south or west, Penelope could see nothing of what went on in porch or megaron (for the roof of the porch would intervene), nor is she said to do so; but she could hear the song of the bard, and Odysseus in the porch could hear her sob-

¹ *ἐνδὲ δὲ τοῦ αἵθρου*, says Penelope (τ 598) of the Great Megaron, contrasting it with her own 'house'. The women's quarters are also called *μεγάρα* (τ 16).

² Except over the galleries, which form a basement and not, properly speaking, a ground-floor, Professor Müller found no positive evidence of an upper storey at Tiryns, though he admits that the walls are strong enough to bear one. That an upper storey extending over the whole palace would lead to great, perhaps insuperable difficulties in the way of lighting may be conceded; but Professor Müller, though he prefers to think that the staircase gave access merely to the roofs, which would require constant attention, admits that there may well have been some upper rooms in places. See *Tiryns*, iii, p. 102.

³ See Fig. 59. This is the position of the *thalamos* of Phoenix, the doors of which are in the *prodomos* (F 475 ff.).

⁴ *ἰδοῦσθαι μῆδ' ὅς τις ἄκοιτο* (ν 389). Mediterranean voices have great carrying power and the Saitors were noisy.

⁵ ψ 88.

bing. The only objection to this interpretation is to be found in the meaning commonly ascribed to the phrase *κατ' ἀντησιν*. *ἀντησιν* is taken to be an abstract noun and the phrase to be equivalent to *κατ' ἐναντίον*. This would indeed point to the position on the south side of the courtyard; but the rendering is purely conjectural. I venture to suggest that *ἀντησιν* means window, as *ἀντηρίς* did, according to Suidas, in later Greek. Windows must have been known to the inhabitants of the palaces¹ and to Homer, and there is no rival claimant to the meaning in his vocabulary. Whatever the interpretation of the phrase, Penelope's room presumably had a window. It would also naturally have a door of its own, for the queen's apartments would hardly lie directly open to the prodomos and so to the court. This is the door which the author of τ 39, even if he be an interpolator, had in mind, and it is this door, too, which Telemachus rattles when he is sent (χ 390 ff.) to fetch Eurykleia, having first passed, though this is not mentioned, through the door in the side-wall of the prodomos. The thalamos of Phoenix seems to have opened, as a young man's well might, directly on the prodomos (*I* 471-6).

Aithousa and Prodomos

The word *aithousa* in its architectural sense is explained by the ancient commentators to be a *paslas* (i.e. a porch or a room with an open side) or a stoa.² In Homer two aithousai are distinguished, the *αἶθουσα αὐλῆς*, specifically so described,³ outside which lay the gates of the αὐλή, and another in the immediate neighbourhood of the megaron, in which guests are lodged for the night. This latter is generally identified with the two-columned porch of the megaron as seen at Mycenae and before the Great Megaron at Tiryns, and is sometimes for convenience called the *αἶθουσα δόμου*, though the phrase is not used by Homer. The *αἶθουσα αὐλῆς* in the strict sense may have meant only the two-columned inner face of the *πρόθυρον* of the αὐλή, but must have been extended to include the whole colonnade on this side of the court since the dead bodies of the 108 suitors were laid out in it.⁴ Whether the aithousai are imagined as extending right round the αὐλή, as round the great court of Tiryns, there is nothing in the poem to show.

The next question that arises is whether the megaron of Odysseus possesses a vestibule, like the Great Megaron and that of Mycenae, or merely a porch, like the Little Megaron and that of Phylakopi. That the vestibule was not confined to large and elaborate buildings is shown by the plan of the LH III houses at Korakou.⁵ No such room, however, is explicitly mentioned in the poem, and it is certainly not allowed for in the

¹ Tiryns, iii, p. 187.

² According to the scholia of B and T on *Q* 323 the word remained (like others in Homer) in use among the Cypriots, with the meaning of *παράς ἀμφίθεπος*.

³ *I* 472, σ 101-3.

⁴ χ 449.

⁵ Blegen, *Korakou*, p. 81, fig. 112. It is possible that the walls which cut off a narrow

Slaying of the Suitors, where it would in fact greatly complicate the situation of Odysseus and his supporters and must have been mentioned had it existed. It will hardly be questioned that the threshold from which Odysseus shoots is the threshold of the megaron itself, from which position alone he could command the interior.¹ Further, of the spears fruitlessly hurled by the Suitors one hits the *σπαθμὸν μεγάροιο*, another the *θύρην πυκνῶς ἀπαρῶν*,² i.e. one leaf of the double door. This clinches the matter, for when there is a vestibule, the door or doors are in the wall which divides it from the porch, the inner doorway being closed merely by a curtain, if at all.³ Anything further would be superfluous, for the doors are closed at night only, and for the sake of security; by day much of the light must have come through the doorway. The porch of the house of Odysseus is called both *πρόδομος* and *πρόθυρον*,⁴ and there is no direct evidence that this term could be extended to cover a vestibule as well. When the disguised Odysseus passes the night in his own palace, he is given a shake-down in the *prodomos*.⁵ Telemachus and Peisistratos on their visit to Menelaus are given beds in the aithousa, which, as we have seen, can only be the porch. A few lines farther on they are said to sleep *ἐν προδόμῳ*,⁶ and we are consequently able to infer that the term *πρόδομος* can designate or at least include the aithousa, and that the porch in all cases served as the bedroom of a guest,⁷ whatever his rank. The reason is obvious. Hospitality was extended to all strangers, with or without credentials, and the porch conceded a roof without giving admission, as the vestibule would have done, to the interior of the house.

It may be significant that the palaces of Scherie and Sparta have an aithousa by way of porch, while the term is not used of the simpler dwelling of Odysseus with its earthen floor and midden in the courtyard. It is unlikely that we are dealing with a traditional term once applied to the stately two-columned porch as we see it in the Great Megaron and at Mycenae. Much more probably it arose in Ionia where in the fourth century a good house was apt to have on the north side of the courtyard 'one room less deep than wide completely open to the court',⁸ the roof supported

vestibule behind the single-columned porch were an afterthought, but they are of I.H. III date. The object may have been to moderate draughts in the megaron, a point which may account for the irregular placing of the doors.

¹ When his arrows are exhausted, he leans his bow against *πρὸς σπαθμὸν μεγάροιο* (χ 120-2), but it is not certain that the term megaron is strictly limited to the actual hall.

² χ 258, 275.

³ *BSA*, xxv, pp. 233, 237, and 239; Schliemann, *Tiryns*, pp. 215 and 216. It can hardly be due to accident that neither at Mycenae nor in the Great Megaron at Tiryns was any pivot-hole discovered for a megaron door, whereas they were found by the thresholds of the vestibule doors. The door of the Little Megaron, which had no vestibule, had a pivot-hole in which the bronze cap of the wooden door-pivot was discovered; *ibid.*, p. 281.

⁴ ε 1, 143, σ 16, ρ 355.

⁵ ε 3-4, 141-3.

⁶ δ 297, 302.

⁷ Telemachus in the palace of Nestor and Odysseus in that of Alkinoos sleep in the aithousa.

⁸ Robertson, *Greek and Roman Architecture*², p. 298, of Priene, for which see further Schrader u. Wiegand, *Priene*, pp. 285 ff.

by a pair of columns. The Little Megaron and probably that at Phylakopi have a porch with no column and of considerable width, which would require a beam of great size to span it. A less exacting form would have a single column like one of the houses at Korakou; the inconvenience of thus masking the megaron door may have caused this plan to be discarded when a really dignified building was in question. It is possible that the porch of Odysseus was thus conceived, at any rate in the older poem of the Bow-fight. That it had at least one pillar we know, for Telemachus, arriving from the country, leans his spear against it before crossing the stone threshold.¹

The question of the vestibule has a certain importance in connexion with that of the two thresholds, stone and wooden,² of the megaron of Odysseus. Had it been possible to establish the existence of a vestibule, the stone threshold might perhaps have found its place in the doorway leading into it from the porch, which might in a driving storm be somewhat exposed to the weather, and the wooden in the completely sheltered doorway of the megaron itself.³ As we have seen, however, there is no place for a vestibule in the house of Odysseus, and the two thresholds must be accommodated without its aid. We have no example in the Mycenaean age of a threshold between the court and the porch, though at Phylakopi there is a stone step, necessitated by a difference of level. If we regard the text of the poems alone, the solution offered by Myres, that the wooden threshold is a sill overlying the stone one, which projects far enough beyond it to catch a footfall, is completely satisfactory; but it derives no support from the monuments of the Mycenaean age. At both Mycenae and Tiryns all the stone thresholds—and they are numerous—consist of huge single blocks which below ground extend, it is true, far beyond the doorway in every direction, but whose visible surface is of the exact width of the adjoining walls and is carefully dressed.⁴ Signs of wear are not conspicuous; such as occur are distributed over the whole surface,⁵ whereas a wooden sill would have protected a central strip. Further, the threshold of the vestibule at Mycenae is provided with a stop-ledge to prevent the

¹ *Il.* 29-30.

² For the thresholds of Tiryns see the exhaustive account by Dörpfeld *ap.* Schliemann, *Tiryns*, pp. 276 ff.

³ In actual fact all the vestibules and megara of the sites we have been considering have stone thresholds, the wooden thresholds (which can be inferred with certainty) occurring only in the domestic quarters. The *σπίλος οὐδὲς* of the thalamoi in which the axes were stored (§ 43) is quite in order.

⁴ It is true that the floors of the vestibule and megaron at Mycenae are bordered by a row of gypsum flags on to which anyone crossing the threshold in either direction would necessarily step. The remains indicate that in each case the border ran round all four sides of the room; it seems unlikely that such an arrangement would be described by the term *οὐδὲς*. *Hymn Ap.* 206 is sometimes quoted as affording an example of this meaning; but the interpretation, even if correct in the case of the hymn, does nothing to remove the obscurity of the Homeric passage.

⁵ See Dörpfeld (*ap.* Schliemann, *Tiryns*, pp. 276 ff., especially 279), who uses the marks of wear to establish the width of the doorway.

great door from swinging too far.¹ Thirdly, it is contrary to reason to suppose that these enormous blocks were laid with their ashlar surfaces carefully adjusted to the walls merely in order to be covered with wood. In the doorways which have no stone threshold we find simply the surface of the foundation wall on which the wooden threshold was laid. That stone door-jambs or pilasters were faced with wood is true and was carefully demonstrated by Dörpfeld in 1886;² but this feature, strange as it is, is explained as a survival of the stout wooden casing which in the days of crude brick held up the wall, certain to crumble if left to itself. So tough was the tradition that the doors of the Parthenon and Propylaea at Athens were similarly framed with wood, the Erechtheum being the first building on the Acropolis to receive a marble door-frame; but nowhere do we find any hint of a wooden threshold. In the Mycenaean megaron therefore, we have no warrant for a raised wooden threshold. In the Homeric poems, however, we have traces of two types of house, the dwelling of Circe, on whose flat roof Elpenor sought coolness,³ and the gable-roofed, which furnishes a simile for two wrestlers locked in their initial stance;⁴ evidently a very steep roof-pitch is in view. That the latter type was familiar to the poet is suggested by his fairly detailed description of the hut of Achilles,⁵ which has most of the appurtenances of an ordinary house and is definitely stated to have a thatched roof; such a roof must have a steep pitch. The megaron roof at Mycenae was found to have consisted of clay laid on a bed of reeds or branches,⁶ and Schliemann and Dörpfeld had already inferred the existence of a similar type at Tiryns. A roof of this kind, still frequent, as Schliemann points out, in Asia Minor, though not flat, can do with a much lower pitch than the thatched roof and could hardly furnish the simile for the wrestlers. That the clay roof persisted in Greece seems certain; it probably determined the pitch of the classical temple-roof.⁷ There is, however, no reference to it in Homer. In the Geometric age we have evidence for the existence of the steep-pitch roof in the fragmentary models of buildings found at Perachora,⁸ at the Argive Heraion,⁹ the Samian Heraion,¹⁰ and at Aetos in Ithaca.¹¹ Except the Samian example all are of

¹ *BSA.* xxv, p. 233, and cf. *Korakou*, p. 51, for the similar threshold of House I.

² See *BSA.* xxv, l.c., and Müller, *Tiryns*, iii, p. 180. Not only the end of a wall was strengthened in this way; throughout its length, whether it was of crude brick or rubble, it was supported by a timber frame.

³ This is the only possible interpretation of the somewhat obscure account given in ϵ 554 ff. and λ 62 ff. The flat roof is characteristic of Minoan Crete and survives in the seventh-century temple of Prinia. Circe's roof is probably a Cretan touch, of which there are several in the *Odyssey*.

⁴ Ψ 711 ff.

⁵ Ω 448 ff.

⁶ *BSA.* xxv, p. 90.

⁷ This, as K. Müller points out (*AM.* xlviii (1923), *Gebäudemodelle spätgeometrischer Zeit*, p. 68), cannot have been derived from the steep-pitched thatched roof, for Greek tiles never at any period exhibit any of those arrangements for suspension which such a pitch would necessitate; from the first they must have been bedded in the clay of the old earthen roof.

⁸ *Perachora*, pp. 34 ff., pls. 8-9 and 117-20.

⁹ Müller, *AM.*, l.c.

¹⁰ *AM.* lv (1930), p. 16, Beil. iv, fig. 6.

¹¹ *BSA.* xliii, pl. 45, pp. 101-2.

clay.¹ Those from Perachora (Pl. XXXII, 2 and 3) go back to c. 800, possibly some little way into the ninth century, that from the Argive Heraion dates to c. 750. Whether they represent temples or dwelling-houses is immaterial; the two would not be sharply differentiated at that date. The specimens from Perachora have an apsidal, that from the Heraion a rectangular ground-plan, and the roofs differ in detail, but in all cases in which reconstruction has been possible agree in being of steep pitch. The best-preserved from Perachora exhibits a rope stretched along the ridge, virtual proof that a thatched roof is represented, and having regard to the abundance of material available in some parts of the Argolid, we may suppose that the others, or most of them, are so conceived.²

The largest fragment of the rectangular model from the Heraion preserves a feature of some interest to the present inquiry in the shape of two raised thresholds, one spanning the distance between the two columns which once supported the roof of the porch, the other at the door of the living-room or, more probably, the cella (Pl. XXXII, 1).³ A minute fragment of the porch floor also exhibits the beginning of a threshold; in Professor Oikonomos' reconstruction it finds a place at the side.⁴ To the material of the building and its accessories the model gives no clue; but the actual remains of Geometric temples would lead us to expect a few courses of undressed stones (possibly with an outer facing of orthostats) supporting a wall of crude brick,⁵ wooden columns,⁶ a wooden floor-frame, and (since none of stone

¹ The Samian example is of limestone and dates to the late seventh or early sixth century. Its ground-plan is elliptical. The American excavators of the Agora at Athens have laid bare the fragmentary foundations of an elliptical house of the Geometric age (*Hesp.* ii, pp. 344 ff.).

² Though we have no evidence for roofing with shingles, i.e. with pieces of plank used as tiles, this method also may have been employed for roofs of steep pitch. According to Pliny (*NH.* xvi. 36) it was the method in use at Rome until the war with Pyrrhus, and the best material was oak. Pliny calls attention to woods by which the site was surrounded in early times. Relative scarcity of timber and especially of trunks of any size makes it improbable that the method was ever general in Greece; but it is possibly indicated by the chess-board pattern on the Aetos fragment. We should expect planks rather than squares, but the inadequate size of the timber available may account for this. Shingling was probably common in the well-wooded north, whence the steep roof came to Greece and the tradition might well live on for a time. Until baked tiles of eighth-century date have been found (as may well happen) it would be rash to interpret the three squares of the Aetos fragment as tiles; they may represent a pattern painted on a wooden roof. None of these roofs can represent the clay and reed variety; the clay must be tramped to the requisite hardness and afterwards kept in order in the same way or by rolling with a heavy roller. In Asia Minor a drum from the column of some ancient temple sometimes serves the purpose. Obviously a steep pitch is precluded. It may be noted that *ἀκροφόρες*, the term used in the simile of the wrestlers for the sloping rafters, is unique not merely in Homer but, it would seem, in Greek. The steep-pitch roof probably went out, at all events in the towns, when the impervious-baked tile came in (*v. infra*, pp. 440-1), and this special type of rafter was forgotten. The name seems to imply that the upper ends of a pair of rafters crossed, like the heads of the wrestlers.

³ The model reconstructed from the best fragments of Perachora has a raised dorsill, but nothing between the columns of the porch.

⁴ *Eph. Arch.*, 1931, p. 15, fig. 15.

⁵ *Gr. and R. Architecture*, p. 23 f.; *Artemis Orthia*, p. 10; *Fouilles de Delphes*, ii, p. 150; *Perachora*, p. 28, pl. 116.

⁶ Stone columns are unknown in the Mycenaean and Geometric ages, and also to Homer,

has come to light) a wooden threshold. Homer, as we have seen, knows the steep-pitch thatch roof; he probably was equally familiar with the porch threshold and the raised megaron threshold: both unknown as far as our evidence goes in the Mycenaean age. The latter is a primitive and clumsy device,¹ but would serve to prevent flooding and the washing of mud and debris into the interior. If it were customary for the outer threshold to be of stone and the inner of wood, the indications of the *Odyssey* would be perfectly clear to a contemporary audience. It is true that a raised threshold does not very well suit some of the Homeric indications; when Odysseus leaps ἐπὶ μέγαν οὐδόν,² he does not perch himself on anything so high and narrow as the threshold of the Argive model, and for a stone threshold extending beyond the width of the walls we have no more evidence in the Geometric than in the Mycenaean age. Here something like the great doorway of a Mycenaean palace with its flat and ample threshold must be in view, a type which the first colonists may have perpetuated in Ionia, and which some older version of the Bow-light may have preserved. Later on, Odysseus and his three supporters are said to stand ἐπ' οὐδοῦ,³ but this can hardly mean 'on the threshold'. Four men could doubtless find standing-room on the great conglomerate blocks of Mycenae and Tiryns, but as a disposition of forces the arrangement would be unpractical. The key to the meaning of the passage lies in μέγ and δέ, and the meaning is, 'they stood, the small party by the threshold, the Suitors inside the hall'.⁴ Those passages in which an οὐδός is used as a seat on the whole suit the raised type, especially that which describes Penelope in her despair seating herself ἐπ' οὐδοῦ θαλάμῳ.⁵ If she had wished to sit, like Constance, on the ground, there was no reason to choose the doorway. The wooden threshold on which Odysseus sits⁶ is on our present hypothesis similarly raised, though, as has been seen, this is forgotten when he leaps on to it, bow in hand. The meaning of ἐπὶ . . . οὐδοῦ ἐντροσθε θυράων I should take to be 'within the doorway', a well-established meaning of the plural θύραι, i.e. he sits between the door-jambs, a meaning conveyed in κ 62 by παρὰ σταθμοῖσιν ἐπ' οὐδοῦ. So Iros finds him (σ 10); but in line 32 we find that the pair has shifted its position:

προπάρουθε θυράων
οὐδοῦ ἐπὶ ξεστοῦ πανθυμαδόν ὀκρίωντα.⁷

who mentions a peg knocked into a κίων in the highly sophisticated palace of Alkinoos (δ 66-8).

¹ It has, however, a wide range, for the threshold over which the Roman bride had to be lifted must have been raised.

² χ 2.

³ χ 203-4.

⁴ For this use of ἐπὶ cf. α 135, ἣν δέ μοι γῆ' ἐστηκεν ἐπ' ἄγρου. It recalls the use of the locative genitive without preposition to express contrasted directions, e.g. πύλῃς ἐκτός ἐών, οἱ δ' ἐνδοθὶ μῆνιν ὄφραον (δ 678), where 'in the courtyard outside' is plainly the sense required, as in ε 239. ⁵ δ 718. ⁶ ρ 339.

⁷ The οὐδός might be mentioned to show that they are within the Suitors' line of vision from the hall.

Here again it would seem that *ἐπὶ* means 'near', 'in the region of'; they are in the *prodomos* (here again called the *prothyron*; cf. p. 416 *supra*) like the Suitors in a 107. The fight takes place in the *prodomos*, for when it is over, Odysseus drags his fallen foe *διὰ κ' προθύροιο* and right across the courtyard to the gate. Hence, though the epithet *ξυστός* gives us no information, since it is applicable equally to wood and stone, the wooden threshold must, on our present hypothesis, be meant. The *οὐδὸς ἐυσταθέος μεγάροιο* (χ 127) may be deferred for the moment, to be treated with the rest of that famous crux; but the mentions of the *λάϊνος οὐδὸς* call for examination. In ρ 30 the interpretation of 'porch-threshold' is not unsuitable; Telemachus leans his spear against the pillar of the porch, steps over the threshold, and proceeds on his way inward. The phrase could, however, equally well apply to the threshold of the *megaron*, *εἰσω ἔεν καὶ ὑπέρβη λάϊνον οὐδόν* being in either case a familiar instance of *hysteron proteron*. In ψ 88 it is somewhat of a surprise to find that Penelope, summoned from her private apartments to the *megaron*, must also cross the stone threshold, for on our present hypothesis this implies that the queen cannot go under cover to the hall which in normal times would be her principal sitting-room; but we cannot base any argument on the singularity, since the position of Penelope's quarters is a matter of inference only. In υ 258, however, we have a completely intractable example, for Telemachus makes his father sit *ἐντὸς ἐυσταθέος μεγάρου παρὰ λάϊνον οὐδόν*. This can only be the threshold of the *megaron* itself. The attempt to base our explanation on the eighth-century model with its outer and inner threshold has failed. It will be noted that the wooden threshold of the *megaron* is mentioned in one passage only (ρ 339-41), where the doorway is described with detail and precision. If this passage were absent, there would be no doubt or ambiguity so far as the threshold is concerned, and the whole narrative would be perfectly clear. We should have a *megaron* with a simple porch and a stone threshold, such as we have in the Little *Megaron* of Tiryns and at Phylakopi; and such, I venture to suggest, was the house of that older poem of the Bow-fight which Homer, as is generally supposed, had before him. It is possible that the discrepant lines are traditional, derived from some other context. A wooden threshold of some queen's chamber would be quite in order; cypresses we know to have abounded at Knossos, and cypress wood has been identified with considerable probability in the palace at Mycenae.¹ The unique form, however, of the adjective *μῆλινος* suggests a later hand.² If in the architecture of Homer's

¹ *BSA*, xxv, p. 257.

² *μῆλη* is of course regular. Here the adjective is being tried in a new position (so far as our extant material justifies us in drawing a conclusion) and is therefore not part of a formula. Elsewhere the adjective occurs only in the *Iliad* (in the form *μῆλινος*) and only as an epithet of the spear. In view, however, of the extreme freedom in adapting quantity to metre exhibited in both epics, the argument as to date cannot be pressed. See P. Chantraine, *Grammaire Homérique*, pp. 94 ff.

own day a system of outer and inner thresholds of porch and megaron, of stone and wood respectively, were in general use, he may himself have composed the lines, inadvertently creating an irreconcilable contradiction in the clear and consistent plan which he seems elsewhere to have kept plainly before his mind's eye. Alternatively they may have been introduced by a later hand (possibly that responsible for the preposterous insertion of ϕ 200-1); this is the explanation which I prefer. Otherwise we must fall back on Myres's superimposed door-sill, which I take to be conceived of as low, flat, and equal in width to the walls, the stone threshold extending well beyond it on either side.

ORSOTHYRE, LAURE, ROGES

The lines on which depends the interpretation of these curious terms, which occur nowhere else in the Homeric poems, are the following: χ 126-30, 136-8, 142-3, 162-3, and 165-6.

The entire passage (126-202) links the Spear-fight to the Bow-fight and consequently belongs to the *Odyssey* in its final form; it was therefore composed for its present place and cannot be much earlier than 700. None the less, *laure* and *roges* can be plausibly identified with features in the LH III buildings of Tiryns. Not so the *orsothyre*.

Though the voluminous controversy to which the lines have given rise seems unlikely to terminate in any general agreement, the issues have nevertheless been simplified. Since Myres's elucidation of the force of *áva* and *κατά* in Homer we have no need to regard the *orsothyre* as involving the use of a stair or ladder as did the ancient commentators¹ and the older of the modern and as Myres himself did in the article cited. When Melanthios went *ἀνὰ πάρος* he was merely proceeding by the zigzag passages of the domestic quarter outwards towards the court. The *orsothyre*, as Bassett by a close scrutiny of the movements of individual members of the Suitors' party has shown with virtual certainty, is situated at the rear of the hall, whether in the back or the side wall; we may assume the latter for the purpose of reconstruction. To the meaning of 'short passages' for *roges* no exception can be taken;² they are naturally distinguished from the *laure*, a long straight corridor. The *laure* is one of the hardiest survivors of the megaron house in Greek architecture. Originally the lane which separated, as in Troy II, two megara belonging to the same group in order to leave a free space for the drip of the water from the roofs, the *laure* retained its traditional position running by the long sides of the megaron when architects were capable of roofing it and including it in a large and complex building. In the palace of the Little Megaron at Tiryns it survives unimpaired, separating the east wall of the hall from the domestic quarter and giving access to the latter. In that of the Great Megaron it exists only

¹ *Et. Mag.* s.v., and Schol. V ad χ 126.

² Cf. Bassett, *op. cit.*, p. 325, and Jebb, *Introduction to Homer*, pp. 182 ff.

in vestigial form; to save space on the cramped hill-top it has been sacrificed on the east side together with the whole of the east wing to the preservation of the Little Megaron, and on the west what should have been its southern half is blocked by the private apartments, which abut directly on the megaron wall and on that of the prodomos, in the position suggested above for the quarters of Penelope. It runs, however, by the northern half of the west megaron wall and round the rear. A long, straight side-passage often occurs in those fourth-century houses of Priene whose resemblance to the LH III megaron has already been noted; it can hardly be anything but a direct descendant of the Mycenaean laure.

The *ᾠδὸς ἐς λαύρην* is by Dickens and Bassett dissociated from the orsothyre, placed in the prodomos and identified with the *στόμα λαύρης* of line 138, with illuminating results; there can be no doubt that this is the true interpretation. One difficulty is left unresolved, viz. the meaning of the phrase *ἀκρότατον δὲ παρ' οὐδὸν* (127). The *οὐδὸς ἐνσταθῆος μεγάροιο* cannot possibly be that of such a secondary exit as the orsothyre; it can only be the threshold of the great megaron door, or, if such exist, of the porch threshold. By the *αὐλῆς κατὰ θύρετρα* is meant the two-leaved door of the main exit from the megaron, so called to distinguish it from the door between the laure and the prodomos, by which Melanthios himself would issue. They cannot be the outer gate of the courtyard, for though Philoitios had secured it with a rope (φ 388-91), Odysseus could spare no men to guard it; if Melanthios could once reach the courtyard, he had a good chance of getting outside the palace and giving the alarm. *ἀκρότατος* can equally indicate the top, the end, or the edge of the object concerned. In the absence of evidence for the arrangements of the eighth-century house no interpretation satisfactory in detail appears to be possible;¹ the general meaning is 'the entrance into the laure was very near the megaron door', but perhaps in the hyperbolical form 'at the end of the threshold', and this prepares the hearer for the objection of Melanthios that the exit from the laure is 'terribly close' to the megaron door and to the formidable stranger.

The episode can now be clearly reconstructed.² The Suitors, huddling at

¹ Bassett's explanation (*loc. cit.*, p. 304) explains nothing and is to me wholly obscure: 'along past the highest part of the threshold. . . . The "way" by which one approached the "laure" was at the same level as the upper surface of the great door-stone; it therefore ran by the sill of ash, which may be regarded as the highest part of the threshold taken as a whole.'

² It will be noted that the narrative of the events which lead up to the fatal feast is compressed in a manner not characteristic of epic, which results in a marked lack of clarity. In the morning Eurykleia warns the maids that dinner will be early (v 156). Presently the Suitors sit down to a regular meal (248-56), but at 276-8 we find ourselves at a sacrifice in the grove of Apollo offered by the Achaeans; these must surely include the Suitors, though we are not told that they leave their places in the hall. By 279 they are back in the hall again, for the insult of the ox-foot is offered within doors.

Nothing of value is preserved in the scholia, but there is a statement in B that the *kerukes* who conduct the sacrificial victims through the town are Ithakesians and public officers, not the heralds of the Suitors. Possibly the original commentator went on to suggest that the

the inner end of the hall, propose to Melanthios to slip out by the orsothyre (which he has every chance of doing unobserved, since the crowd of Suitors masks his movements) and by way of the laire try to gain the courtyard. Melanthios points out that as the laire has its exit (σπάσμα λαύρης) in the prodomos, this will bring him too near Odysseus and his party; and we know that in fact Eumaios, though he forgets his job in the excitement of watching events in the hall, had been told to watch this very spot, which is from the point of view of Odysseus ὁδὸς ἐς λαύρην.

It is evident that the term orsothyre was as obscure to the ancient commentators as it is to ourselves. It did not survive; the only other example is quoted, for an abnormal quantity, from Semonides of Amorgos¹ and gives us no further information, save that it confirms the idea of a door at the back. Semonides is, it is true, a poet, but one sufficiently prosaic to suggest that in Ionia the word may have been in ordinary use and described a normal feature of the house. Of a secondary exit from the megaron, Mycenaean buildings offer no instance. The stone courses of the Great Megaron at Tiryns are preserved and show that there was no second door on the level of the floor. That in the rubble masonry which with its timber framework rested on this stone pedestal there might be a door thus raised above floor-level to reduce as far as possible draughts on the hearth is conceivable but is merely an unsupported conjecture, without even such plausibility as it had when the meaning of ἀνὰ ῥῶγας was not understood. That the megaron maintained its original isolation is infinitely more probable. Once the central hearth disappeared, however, there was no reason for preserving so inconvenient a seclusion, and it had no doubt been abandoned centuries before the date of the earliest houses of Priene. Here House XXXIII² (Fig. 61) looks almost like an atrophied version of the palace at Tiryns. There is a court reached by a laire running from the street; on its northern side stands the principal room, approached through a prodomos—or did the inhabitants call it an aithousa? On the west side are subsidiary rooms; on the east the laire continues its course past the wall of the prodomos and 'megaron'. To rooms and laire access is given by a door in either side-wall of the prodomos, an arrangement which we have already seen in the Little Megaron at Tiryns. From the 'megaron' a side-door leads to one of the rooms on the west; here we have the descendant of the

Suitors did not leave the hall. This is the view of Sir John Myres and is suited to their impiety. Cf. the Alexandrine criticism of an equally elliptical piece of narrative in *O* 668-73, which merely issued in rejection of the passage; Schol. T with more resource adds εἰ μὴ λόγους ὡς λέγειν ἔλλα ποιήματα δι' ὧν ἀδεύηται ταῦτα. In the *Odyssey* it appears probable that the obscurity arose because the poet was virtually discarding an episode of the Bow-fight to which he nevertheless felt it necessary to allude. The mention of Apollo's festival could not be wholly omitted, for Apollo as Lord of the Bow must preside over the coming contest and see justice done, howsoever placated by the evil-doers; but to Homer, who gives the ultimate victory to the spear, he is much less important than Athena.

¹ Semonides, 17 B. = 15 D.; cf. *Et. Mag.*, s.v. and also L.-S.², s.v.

² Schrader und Wiegand, *Priene*, pp. 285 ff.; *Gr. and R. Architecture*, p. 299, fig. 124.

orsothyre. The house of Odysseus, presumably fully intelligible to an audience of c. 700, stands about midway between the Little Megaron of Tiryns and the houses of Priene which somehow or other are derived from it. In Homer's day the megaron had, we must conclude, already gained greater freedom by dispensing with its fixed hearth, no longer necessary in a room of reduced dimensions, and adopted the convenient side-door which allowed the poet to add his ingenious and exciting appendix to the Bow-fight which, fought out in the original simple conditions, came to a too speedy end. Some expansion of the traditional tale was indispensable. The slaying of the Suitors is the climax of a great epic and must have μέγελλός τι; the Bow-fight alone, in which suddenness and speed were the essential elements, could not be developed on the requisite scale.

Unlike *orsothyre*, the word *laure* is common to all periods of Greek and means a narrow passage; it is applied equally to an open lane and, as the proper name Laureion shows, to a mining gallery.¹ At Tiryns the passages were undoubtedly roofed over, for whereas the courtyard had a drain connected with the bathroom, the system was not extended to the passages. Whether the laure of the house of Odysseus is to be thought of as covered or not there is nothing to show, nor is the point material; it is in immediate contact with the megaron, presumably throughout its length, since it gives access to the prodromos. If we suppose the truncated laure on the west side of the Great Megaron to continue to the prodromos, separating the domestic quarter from the great hall, as happens in the case of the Little Megaron, we have the scene perfectly set for the situation in x. Melanthios, once he has passed through the orsothyre, has two courses open to him: he may proceed straight to the prodromos end of the passage, turn to his left and come out into the prodromos, or he may cross the passage with all possible speed and disappear into the zigzag *ῥώγες* immediately beyond. He chooses the latter course, and we need not be surprised that Eumaios misses his dash for cover. All he had been told to do was to see that no one approached the *ὁδὸς εἰς λαύρην* from the inside, and this, considering the distance of the orsothyre, would not demand absolutely continuous watchfulness. Since the door of the thalamos was supposed to be bolted, Odysseus had given no instructions to provide for its safety and Telemachus is quite right to shoulder the blame, since it was he who left the door open. Where Homer in his imagination placed the store-chambers we cannot tell; at Tiryns—since the ruined buildings south of the forecourt seem to have been residential blocks—they are probably

¹ In Patristic Greek it is applied to a type of monastery in which a long corridor gave access to a row of cells opening off it; in modern Greek it denotes a monastery in general. In all our house-plans, whether from the Argolid of the Bronze Age or Priene on the verge of the Hellenistic period, the laure runs parallel to the side-wall of the 'megaron'. Presumably, therefore, it did so in the house of Odysseus; on this point I disagree with Bassett's plan, on which it is at right angles to the side-wall.

to be sought in the still more ruined quarter west of the αὐλή. Penelope's megaron, however, if it is rightly placed with a window giving on to the prodomos, must be thought of as actually adjoining it and having a common wall, like the side-room of the house at Priene. The door into the prodomos on this side would be the queen's private door, and could not afford a common exit from the laire. The storerooms may then be taken as situated on the other side of the megaron and separated from it by the laire.¹ We are obviously in the region of pure conjecture; but the requirements of the story can be fulfilled within the limits of a plan consistent, broadly speaking, with the extant remains. It will be noticed that the houses of Priene commonly preserve the laire on one side, and one only.

As has been indicated above, a difficulty still remains in the line ἀκρότατον δὲ παρ' οὐδὸν εὐσταθέος μεγάροιο which describes the position of the οὐδὸς ἐς λαύρην in the side-wall of the prodomos. If the οὐδὸς is the threshold of the megaron in the strict sense, the phrase is inapplicable to the megara we know. If, however, we may take the megaron to include the prodomos, and turn to the model from the Argive Heraion (Pl. XXXII, 1), we see that a door in the side-wall of the porch would be close to the extreme end of the outer threshold. The poet, as it appears to me, has a perfectly distinct image in his mind and is giving indications which would make it plain to his audience. Unfortunately our knowledge is too scanty to allow us a like certainty; but in general outline the story is clear and, epically speaking, credible.

Some minor points remain to be discussed. Noack's acute analysis² has established the original meaning of *μυχὸς δόμου* as no separate chamber, but merely the rear part of the megaron—roughly speaking, that between the hearth and the back wall. This is clear from the passage which describes the walls of the megaron of Alkinoos and the row of chairs extending ἐς μυχὸν ἐξ οὐδοῦ.³ Here, in the days of the old isolated megaron house, master, mistress, and children must have slept, and in some early houses of megaron type this space is partitioned off, for example in the apsidal MH house at Korakou, and in megaron A at Thermon.⁴ The feature is also found in private houses of the LH III period, e.g. in House H at Korakou;⁵ but from the megaron house with adjoining subsidiary rooms it disappeared. The house has become the palace and the great hall a state apartment in which the court assembles and in which public business may be transacted. Evidently for Homer the term has lost its specific meaning; it is used when Nestor and Menelaos retire for the night, but with prompt inconsis-

¹ It is owing to accident that at both Mycenae and Tiryns each palace has subsidiary rooms on one side only; at Mycenae the narrowness of the ledge, and at Tiryns the existence of the Little Megaron, prevented development.

² *Homerische Paläste*, pp. 45 ff.

³ η 26-7, 95-6.

⁴ *Korakou*, p. 77, fig. 110; *Gr. and R. Architecture*², p. 52, fig. 20.

⁵ *Ibid.*, p. 92, fig. 121.

tency Menelaos appears from his thalamos next morning.¹ It had probably from a very early date played in the Achaian dialect the part of a preposition meaning 'within', perhaps with the connotation of remoteness and seclusion. The use by the Paphians of $\mu\omicron\chi\omicron\iota = \epsilon\tau\omicron\varsigma$ to which Hesychius bears witness points in this direction, and the meaning is preferable in some of the epic cases of $\mu\upsilon\chi\omega$ followed by a genitive (e.g. in *P* 36 and perhaps in ϵ 226, ϕ 41, ω 6) and unobjectionable in all.²

The megaron is a singularly rebellious member in an architectural complex. Its smoke-hole precludes an upper story, its central hearth secondary doors. A door in the side-wall of the porch leading to subsidiary rooms would always have been possible, but until considerable skill in roofing had been acquired, the laire remained open to the sky as we see it in Hissarlik II; to cover it would have meant creating a sort of trough in which the drip from the megaron roof would have been caught and held. It is strange that so inconvenient a building should have held sway for so long.³

That this primitive and inconvenient type of great room became the core of the Mycenaean palace can only be explained by its association with the aristocracy dominant in the Third Late Helladic period, and this same association has secured it its place in epic poetry. The data of the *Odyssey* justify the reconstruction of the house of Odysseus on these lines, and except in the case of the foreign palace of Priam the sparse references in epic to other dwellings suit this type, with its courtyard, its public room, and its subsidiary chambers.⁴ As Noack points out,⁵ while the hall of the ruler is always called megaron, the public room of lesser dignitaries is termed indifferently megaron and thalamos. $\delta\omega\mu\alpha$ covers all secondary rooms, of whatever kind.⁶

It is true that many characteristic though secondary features of the

¹ γ 402, δ 304 and 307-10. It is possible that the position of the throne-base in both the megara of Tiryns, not, as might have been expected, at the back on the axial line, but at the middle of the east wall, may be a survival of the house-plan of more primitive days. When Penelope enters the hall after the slaying of the Suitors (ϕ 88-91), she sits $\tau\epsilon\lambda\chi\alpha\iota\ \tau\omicron\iota\varsigma\ \epsilon\tau\epsilon\rho\omicron\upsilon$ (certainly one of the side-walls), possibly in the seat of royal authority. Odysseus sits by one of the pillars of the hearth, where the firelight will give her an opportunity of recognizing him. Atete regularly sits by one of the pillars presumably because she liked the warmth and light and Alkinoos sits beside her (ζ 305-9), but this is in private life.

² Cf. Bowers, *JHS*, liv (1934), p. 67.

³ That the draught created a real problem may be seen by the various experiments made in LH III at Korakon in the placing of hearth and doors, as well as in the neolithic houses (also of megaron type) at Sesklo and Dimini.

⁴ The house of Amyntor, father of Phoenix, adapts itself readily to the plan of Tiryns. When Phoenix, imprisoned in his thalamos, succeeded in breaking the doors, he found himself in the formidable situation sketched by Melanthios; his only way out lay through the prodromos where, plainly visible in the light of the fire, he should have been stopped by the guards. As they were apparently asleep, he avoided them and got away by climbing over the $\delta\omega\mu\alpha$, never coming into the light of the second fire, which was in the $\alpha\lambda\delta\omicron\upsilon\alpha\ \alpha\delta\lambda\alpha\varsigma$, i.e. in the inner porch of the outer gate (*f.* 471 ff.).

⁵ *Homeric Paläste*, pp. 49-54. The relevant passages in the poems are: the house of Paris, *Z* 316, cf. *I* 125 and 142; the house of Hector, *Z* 377, *X* 440-2 and 460.

⁶ χ 494.

Mycenaean palace have faded out of its image in the poems. There is no mention of the frescoes with their lively scenes and brilliant colouring,¹ nor of the plaster floor, also gaily decorated. As the floor of Odysseus' megaron had to be sacrificed, first to the trench dug for the axes, and secondly to the necessity of removing the traces left by the slaughter of the Suitors, it was convenient that it should be of earth, as is normal in private houses of the Third Late Helladic age;² but the material must also have been plausible to the poet's audience. This reduced magnificence is only what we must expect if the poet is not drawing on a poetical tradition of the great age, but is representing contemporary architecture or that of the immediate past. This is precisely the period for which we have at present no archaeological evidence and little hope of more in the future, at any rate in mainland Greece. Some of the most likely sites have suffered from continuous occupation; thus we have no settlement corresponding to the proto-Geometric part of the Kerameikos cemetery and only the scanty remains of the Geometric house in the Agora for the succeeding period; while in Thebes we have no evidence at all for the proto-Geometric period, and even the LH III palace lies buried and inaccessible under the modern town. We may assume that the house-plan of *αὐλή, μέγαρον*, and *δῶμα* survived the Bronze Age, maintained by the relics of 'Achaian' society, i.e. by the descendants of the royal and noble families of Bronze Age Greece, in whatever part of the country they lived. We may feel sure that their buildings were incomparably less massive and durable than the best of LH III, and need not be surprised if foundations, when not built over, have totally disappeared. Stones shaped in however slight a degree are always welcome booty for the builder of a later generation; we may remember that Buschor's researches into the architectural terracottas of the Acropolis left him with the relics on his hands of forty buildings for which not a trace of foundations could be discovered. It is therefore sadly probable that the gaps in the history of the domestic architecture of Greece will never be filled. Nevertheless, that a house-plan of considerable complexity survived transplantation to Ionia the attenuated survivals at Priene show; these derive from the mainland palace or great house, whereas the temple with its long and narrow proportions and its absence of side-chambers derives from the simple megaron house.

The Homeric palace is isolated; it may include an *ἄστυ* which doubtless accommodated the king's men-at-arms and other functionaries,³ as Mycenae and Tiryns are well qualified to do. There is no hint of other houses

¹ The *ἐῖματα παραβάλλοντα* of Θ 435, Ν 262, and δ 42, γ 121, which presumably are the faces of crude brick walls covered with plaster, occur twice in the courtyard, where such protection from the weather would be desirable, once in the hut of Idomeneus, which was doubtless, like that of Achilles, a virtual house, and once in the house of Odysseus.

² Korakou, p. 82 (House L) and 83 (House P).

³ So Troy (Z 350-3), though the foreign town should perhaps not be taken as typical; but cf. I 573-89 for the town of Meleager. The epithet *φασσινυχῶν* (genitive) preserved in a frag-

near those of Menelaos and Odysseus. The palace of Nestor is an αἶψον πολίεθρον built at an unspecified distance from the sea on an eminence rising above the plain (γ 484-5), and Pherai seems to have been of the same type (γ 495). The foreign palace of Alkinoos, on the other hand, for all its splendour is but the 'best house' of an ἄστυ through which the stranger must be directed. The town is built on a promontory and secured by the narrowness of its approach primarily against attack from the interior; with its sanctuary of Poseidon, its agora, and the controlling power of the nobles recognized by the king it suggests the conditions of an early Ionian settlement. Its splendours are certainly foreign and Oriental, probably in part of Egyptian origin;¹ those of Menelaos are presumably also Eastern. We are not told how the costly materials specified are employed in his palace (δ 72-3). The metals are doubtless imagined as covering the walls; elektron is certainly not amber, but the metal.² That the ivory was also thought of as part of the architectural decoration (the purpose which it presumably served in the 'ivory house' of Ahab) is probable; in another passage, however (τ 55-6), it appears as inlay in furniture, a use for which we have a parallel in some of the ivories of Nimrud,³ and similar furniture may be meant here. It is natural that Oriental modes of decoration, of which some knowledge and much rumour must have been current in the eighth century, should have left their traces in the *Odyssey*.

The characteristic feature of the megaron common to house and palace—the central hearth—though it has vanished from the houses of Priene, survives in the epics, where, up to a point, it seems to play the same part as its prototypes in real life. Except in the huts of Achilles and Eumaios, no cooking is done on it, as none, we may feel sure, was done on those of Mycenae and Tiryns. The sacred character of these has been put beyond doubt by excavation,⁴ but their function was not merely symbolical. The

mentary Arcadian dedication (Hoffmann, *Gr. Dial.* i, p. 22; Bechtel, *Gr. Dial.* i, p. 321) and presumably applied to Athena suggests that ἄστυ may have had in Achaian exactly the meaning which αἶψον originally had in other dialects of Greek.

¹ See Chap. II, p. 97. For the frieze of cyanus in the palace of Alkinoos the alabaster dado from the porch of the Great Megaron at Tiryns has sometimes been adduced as a parallel, on the strength of the small roundels of blue glass paste which form the eyes of the spirals and rosettes with which it is decorated and narrow strips which form frames for the design. See Schliemann, *Tiryns*, pp. 284 ff., and *Tiryns*, iii, pp. 139 ff. The comparison is obviously inappropriate. A striking parallel has been proposed by M. Schuhl (*Essai sur la formation de la pensée grecque*, p. 23) in the Assyrian frieze of blue as exemplified in the palace of Sargon II at Khorsabad (P. et C. ii, pp. 702, 706, pls. xiii and xv); though it is true that in these elaborate examples the blue merely forms a background for a design in other colours.

² The seventh-century temple of Apollo Pythios at Gortyn had possibly an interior decoration of bronze plates, like the Chalkioikos (*Gr. and R. Architecture*, p. 57). In the East the method had long been practised.

³ *Irak*, ii, p. 184.

⁴ Only a part of the great circular hearth at Mycenae, whose original diameter is calculated at 3.70 metres, has been preserved, a fact which has made it possible to examine it in section (*BSA*, xxv, pp. 241 ff., pls. xxxix-xli). It consisted of a circular platform of clay surrounded by a ring of porous stone; over the clay was a layer of plaster with a moulded rim which required such frequent renewal that ten successive layers of plaster were counted at the outer edge.

remains of the hearth of Mycenae show that the fire maintained on it was constant and large; it must have served the purpose, as the Homeric hearth does, of warming and partially lighting the great hall. The stratum of clay which formed its substructure was burnt red by the heat of the fire. Round such a hearth ash must accumulate; we need not be surprised to find it in the palace of Alkinoos.

The sanctity of the hearth, however, is much less apparent in the poems than in the megaron of Mycenae. There it must surely have received offerings; in the poems this does not happen in the palaces, but only in the huts of Achilles and the swineherd (*I* 205-20, § 420-9). In the palace of Alkinoos, however, it is by the hearth that Odysseus finds sanctuary, even as Themistocles did in the house of Admetus king of the Molossians,¹ which probably bore a stronger resemblance to the temple-models of Perachora. Moreover, the hearth of Odysseus enters into the formula of an oath,² though under the otherwise un-Homeric name of *ἱερὴν*. By this term alone it is known in Hesiod, where its sanctity is also recognized (*Op.* 734); while in the *Theogony* (454) the goddess *ἱερὴν* makes her first appearance, sister of Hera and Demeter. The adjectives *ἐφέστιος* and especially *ἀνέστιος* testify to the *ἱερὴν* as the symbol of the social unit.³

On the whole, then, the house of Odysseus and the other Achaian buildings mentioned in the poems agree in their general structure with such a relatively simple Bronze Age type as that of the Little Megaron at Tiryns, but presuppose its survival into the succeeding age and its transplantation to Ionia. That the story of the Vengeance in its simplest form, the Bow-fight, first arose in that period and that region is made certain by the *clou* of the situation, the bow itself. That it is of the composite Asiatic type has been shown above; for the use of this on the mainland in Mycenaean days there is, as we have seen, no evidence. It is significant that the Odysseus of the *Iliad* is not an archer, and that the poet of the *Odyssey* has to devise

The rim was on each occasion painted with designs similar to those which decorated the small round movable hearths found at Knossos (*P. of M.* I, pp. 551; cf. *BSA*, xxv, p. 225, where further references are given), a fact which, together with the circular shape, suggests that the great fixed hearth of Mycenae, descendant though it be of the ancient hearth of the mainland megaron, was produced under some degree of Cretan influence. At Tiryns only a gap in the plaster floor, rectangular in the Little Megaron, circular in the Great, marks the site of each of the two hearths, and no traces of burning were found connected with them. They were presumably stone structures as at Mycenae and disappeared in the period of reoccupation of the palace in the Geometric age.

¹ Thuc. i. 136.

² § 159, p. 156, v. 394, = 231. In the first passage the formula is probably an interpolation imported from v. For the epic lengthening of the second iota, also found in the name of the goddess (*Theog.* 454), and for the Atticized form of the adjectives see Wackernagel, *Sprachliche Untersuchungen zu Homer*, pp. 9 ff. In the *Op.* (734) the second iota is short, the final γ being shortened in hiatus. From Schol. A on *B* 125 it appears that Aristarchus regarded *ἐνέστιος* (§ 265), which he read as *ἐν-ἱερήστιος*, as containing the Ionic form.

³ *ἱερήστιος*, however, the usual Homeric word, occurs in *K* 418 with this meaning. The *ἱερήστιος* never became a goddess, but survived as a portable form of brazier used in secular life for cooking (Aristoph. *Ach.* 888) and as a special type of altar βῆμος ἱερήστιος (Apollon. *Lex.*, Hesych.).

a sentimental reason for his not having taken his formidable weapon to Troy, nor indeed anywhere else. *φύρει δέ μιν ἥς ἐπὶ γαίης*, where, apart from Sutors, he could hardly hope for any game larger than the hares still occasionally found there.

It remains to comment briefly on a few isolated references to architectural matters.

Priam's Palace (Z 242-50)

With regard to the palace of Priam, remarkable alike for the size of the family it accommodated, for the inclusion in it of the sons-in-law, and for the dressed stone of which it was built, it is safe to presume some foreign source of inspiration. Temples are the earliest buildings of dressed stone known in Greece and make their first appearance in that form in the seventh century; for Ionia there is no evidence. Tales of the stone-built palaces of Egypt may have reached Greece in the eighth century, and Greeks may have seen such inhabited by Phoenician kings; though there are no extant architectural remains of this, or indeed of much later centuries in Phoenicia, later usage and the analogy of Solomon's temple make it probable that for important buildings stone was the regular material. There is, however, another possibility, viz. that the passage is a later interpolation. The sense would not suffer by the omission of 243-50; the lines bear some resemblance to those informative passages in the *Odyssey* about Libya and the inhabitants of Crete which we have seen reason to distrust. They might be based on such information as an Ionian mercenary returned from service with Psammetichos or a merchant skipper from Al Mina could give of palaces and Oriental royal families. There are two allusions in the poems to houses built of stones, one in a simile (*II* 212), one in Odysseus' description of the thalamos which he built for himself and Penelope (*ψ* 193). It is safe to assume that the buildings are small, being in each case the work of the prospective occupier, and that the method employed is dry-stone building, with selected and but slightly shaped stones, a common method in a stony region, especially if the local stone splits well along the strata, and one associated with a simple way of life. It is curious that brick should nowhere be mentioned in the poems; since it was used in the Early¹ and the Late Bronze Age² and in the Geometric period,³ and in all probability had never gone out of use.

The Tholos (χ 442, 459, 466)

One building in the courtyard of Odysseus remains to be accounted for—the mysterious tholos which plays a part in the hanging of the maidservants. The scholiast explains it as a round building (which the name implies) in which were kept domestic vessels in daily use, such as kraters and drinking-cups, but this of course is mere guesswork. A different explanation is suggested by a terracotta from Corinth now (or lately) in Berlin, regarded by Zahn as Late Mycenaean.⁴ It consists of three cylindrical structures with peaked roofs and openings immediately below them, joined to each other and mounted on a single plinth.

¹ EH, *Zygonies*, p. 12; *Tiryns*, iii, p. 80.

² LH III, Schliemann, *Tiryns*, pp. 256 ff.

³ AO, p. 10 (Sparta); *Hesperia*, ii (1933), p. 547 (Athens).

⁴ Ebert, *Reallexikon der Vorgeschichte*, v, p. 224, pl. 73 c.

There is no doubt that they represent granaries, for not only similar models but examples of the real building have been found in Egypt, where their use is beyond question. The date of the Berlin example has been questioned on the ground that a similar fragment found in a well in the Agora is Geometric or sub-Geometric.¹ The date, however, is of no importance in relation to the tholos of Odysseus; the types of farm-buildings in all regions are as a rule long-lived, and in any case a Geometric date is entirely appropriate.

Mesodmai (τ 37, υ 354)

Whether the passage in which this term is first applied to some part of the house of Odysseus² is an interpolation is a matter of dispute, but as no such suspicion attaches to its second occurrence in this sense,³ we may assume that the word belongs to the epic tradition. We need not therefore enter into the arguments for and against the genuineness of the episode of the shifting of the arms, so admirably expounded by Monro at the opening of τ. They will probably convince most readers that the entire episode is an interpolation based on a misunderstanding of χ 140-1, which also led to the insertion of χ 23-5; but as any meaning that suits υ 354 seems equally appropriate to the earlier mention, the point is of no importance here. The *mesodmai*—on both occasions the word is used in the plural—are now generally identified with the *mesomnai* which are known from certain Attic and Delphic inscriptions and which in an inscription concerning the building of Philo's Skeuothekē in Peiraeus⁴ are described as the cross-beams which span the nave of a building divided by two longitudinal rows of columns on whose capitals the ends of the *mesomnai* rest. No such arrangement is conceivable in Homer; but it may be that the reference is to beams which united the four columns round the hearth, the *δοκοί* being the secondary beams.⁵

Aristarchus, as is well known, identified the *mesodmai* with the spaces between the columns, a meaning inappropriate in the first passage and impossible in the second. We are not of course warranted in assuming that he was ignorant of the word *mesomnai*, which seems unlikely, and we know nothing of the arguments which led him to his strange conclusion. It is intelligible only if he was thinking of engaged columns.

Fortifications

Of fortification walls we learn very little; there are, however, points of interest in the description of the wall built round the Greek camp, though the indications are too slight to allow of positive conclusions. It was built

¹ *Hesperia*, Suppl. II, p. 187, fig. 138.

² τ 37.

³ υ 354.

⁴ Dittenberger¹, 969 *passim*; see especially line 49, note 25.

⁵ But for the testimony of the inscriptions I should have been inclined to understand *mesodmai* as the axial columns probably characteristic of the I.H. III house. Bases for such have been found in the private house of I.H. III date at Tiryns, and upright columns bear more resemblance to the other object denoted by *μεσόδμῳ*, viz. the mast box (β 424, α 289), than do horizontal beams.

of timber and stone,¹ thus recalling the rubble masonry with timber framework of Mycenae and Tiryns; as Leaf says, however, the phrase *σπῆλαι προβλήτες* (*M* 259) suggests that the timber was used, at any rate in part, to give the wall a perpendicular external face, a use naturally not found in interiors. The sense of the mysterious *κρόσσαι* (*M* 258 and 444) cannot be determined. The word occurs once more in Greek, when Herodotus² uses it to describe the step-like courses of a pyramid in process of construction, before the triangular spaces have been filled up so as to give a straight-edged profile. This strongly suggests that the lower part of the Greek wall had a strong 'batter', such as the outer wall of a medieval castle sometimes has and such as forms almost the sole surviving part of the great wall of Hissarlik VI.³ Such a wall would have throughout the batter a slightly 'stepped' profile. Above it the face would presumably be vertical. Vestiges of this portion in crude brick were found at Hissarlik, but there are also traces of a stone rampart which had presumably replaced the brick, at least in part. That this type of wall was known to Homer, whether by tradition or autopsy, seems probable, to judge by the passage in which Patroklos leaps *ἐπ' ἄγκωνος*, on to the 'elbow' formed by the junction of the sloping and vertical parts of the wall of Ilion.⁴ It may be that the Greek wall is supposed to be of the same construction, batter of stones below, brick or earth and a framework of *φειροί* above. As the batter is unknown in Greece, Crete, and the Aegean islands, the passage apparently embodies a piece of local knowledge, however obtained.

2. THE TEMPLE

The question of temples in Homer has received a new importance since the early date—c. 800 and possibly earlier—of that of Hera Akraia at Perachora has been established.⁵ Further, the occurrence in its earliest deposits of the fragmentary remains of the small house or temple models described above and believed to be imported from Argos⁶ suggests that the Argive Heraion was already in being; there could hardly have been an export trade in votives if piety had not already begun at home, nor will votives of a permanent character be offered to a deity until there is somewhere to put them. Nor can Corinth have been in this respect behind her outpost Perachora. It is a curious fact that all our earliest evidence comes from Dorian sites and that this *ἔθνος πολυπλάνητον κάρτα* should apparently have been the first to give the guardian deity of the adolescent polis a permanent abiding-place within its walls.⁷

¹ *H* 433 ff.; cf. *M* 29, 36, 258-60, and 444.

² *ii*. 125.

³ It is possible to walk up this, at any rate for a good way, without using one's hands (*Troja und Ilion*, pp. 117-18 and Beilage 16; Leaf, *Troy*, pl. viii).

⁴ *II* 702.

⁵ *Perachora*, i, pp. 30-4.

⁶ *Ibid.*, pp. 34 ff.

⁷ The date at which the LH III (?) 'Megaron B' of Thermon was converted from a chief's house to a temple cannot be determined; that of the 'hair-pin' peristyle which undoubtedly marks the temple is fixed to c. 750 by the Geometric votives found under the stone bases of

In the Bronze Age world of the Aegean the temple was unknown. In Greece, as we have seen, the religion of the MH people was not of a nature to express itself in monuments. This reticence extends to the Shaft-graves, which provide little more than evidence that a certain tendence of the dead was maintained at their graves.

In the succeeding (LH II) period the influence of Cretan religion can be seen in several of its manifold forms, only one of which concerns us here. The palace shrine was a vital element at Knossos from the first days of the palace to the last,¹ and was adopted in mainland Greece, possibly as the result of direct propaganda from Crete.² The earliest example is the shrine with tripod hearths of Cretan type excavated by Wace on the Acropolis of Mycenae;³ it dates to the end of the Second or the beginning of the Third Late Helladic period. At Malthi (Dorion) in Messenia⁴ a small house shrine with a good-sized court in front of it was found in a complex of LH III buildings; it contained among other objects a fine double axe-head of bronze, a Cretan symbol far from frequent on the mainland. Since Knossos was by that time lying in ruins, it cannot have been direct contact with her that inspired the sanctuary of Dorion. A shrine of somewhat ambiguous character has been excavated at Asine,⁵ where, in keeping with its character as an outpost, there is no palace; cult was carried on in a large room of megaron type⁶ which may have been part of a private house. On and about a rough dais of stone in one corner was found a remarkable group of cult objects, including five female figurines of terra-cotta; a single head, male and bearded, on a much larger scale; vases in the latest Mycenaean style; and a stone axe. The male head represents certainly the principal, possibly the only, deity; whether the female figures are goddesses, divine attendants, or human worshippers, there is no doubt of their subordination. This contrasts with the state of affairs in Crete, where the Great Goddess in spite of her young male consort remains supreme. The stone axe suggests a thunderbolt, and it is possible that the sanctuary of Asine marks a stage in the progress of Zeus, an admittedly Indo-European and therefore immigrant deity, asserting himself at the expense of the native goddesses; on the LH III limestone tablet from Mycenae the divinity is

the wooden columns of the peristyle, but may be later than the conversion. Professor Robertson now tentatively ascribes the megaron to the tenth century, the temple of Hera Akraia at Perachora definitely to the ninth, and the Artemis Orthia at Sparta to the ninth or eighth (*Gh. and Rom. Architecture*², Chronological Table, p. 323).

¹ *P. of M.* i, pp. 463 ff. and 495 ff., and ii, pp. 332 ff.

² *Ibid.*, pp. 281 ff.

³ *BSA.* xxv, pp. 223-6. Note the tripod hearth in the shrine of the Double Axes at Knossos and the store of nearly fifty at Nisou Khani (*P. of M.* ii, p. 283).

⁴ *The Swedish Messenia Expedition*, pp. 178 ff.

⁵ Nilsson, *Minoan-Mycenaean Religion*, pp. 22-23, pls. iii and iv.

⁶ It has two axial column bases about the centre of the room. No traces of a central hearth were found, but as there was no trace of a cement floor this is not surprising. At Tiryns the existence of the hearths is inferred from the gaps in the floor, circular in the case of the Great, rectangular in that of the Little Megaron.

female.¹ The vases of the shrine belong to the degenerate final phase of LH III, including, however, one which bears an inscription, the latest example of the script current on the mainland in the Bronze Age. A somewhat similar house-shrine of earlier, though still LH III, date has been reported from Berbati. A stone bench set against one wall had supported a large LH III amphora, a small ladle, and four female figurines of the familiar type.²

The limestone tablet, coming as it does from a LH III house, suggests a private domestic cult corresponding to that of the palace; presumably it was an object of devotion at the date of the sack. The deity, who carries a figure-of-eight shield, is a fitting precursor of Athene Promachos and of the Athene whose temple subsequently stood on the Mycenaean acropolis.

In addition to indoor cults sacrifice was offered in the Bronze Age on altars in the open air, as must always be the case if burnt sacrifice is practised on a large scale. At Tiryns the altar in the courtyard is obviously closely associated with the megaron on whose axial line it stands, and probably continued to serve the later temple;³ elsewhere, however, the altar seems to be independent of any sanctuary. At Delphi the lowest stratum outside the east end of the temple of Apollo consisted of black greasy earth interspersed with ash and fragments of bone and containing an immense quantity of Mycenaean sherds and a number of terra-cotta figurines, all female.⁴ Similarly on Samos the lowest stratum in the immediate neighbourhood of the Great Altar contained Mycenaean sherds.⁵

For the ensuing age we have no direct evidence and little information. There is no proto-Geometric stratum at Delphi, where a Geometric deposit about 1.50 m. in depth immediately overlies the Mycenaean;⁶ but probably this only means that the proto-Geometric folk, unlike the Mycenaean, did not throw food-vessels into the fire or break them on the spot. The cult of the palace shrines must have come to an end in some cases (e.g. at Mycenae), but not necessarily in all. At Tiryns the circumstances are obscure,⁷ but it appears certain that while a Geometric population squatted in the secondary apartments, the megaron remained intact and uninhabited until it perished in a conflagration probably *c.* 750. It is difficult to conceive what purpose it can have served through that long post-Mycenaean period if not that of continuing to house the ancient cult.

We learn from Pausanias that the temple of Demeter Thesmophoros had previously been the house of Cadmus and his descendants; the temple we

¹ Pl. I.

² *AA.*, 1938, p. 553.

³ The round structure is Mycenaean and is an altar and not, as is often stated, the head of a sacrificial pit. It was twice reconstructed at dates which cannot be determined (*Tiryns*, iii, pp. 137 ff.).

⁴ *Fouilles de Delphes*, v, pp. ii-iii. Mycenaean and Geometric deposits were found at both ends of the temple and probably once covered the whole intervening space, but were cleared away when the foundations of the temple of the Alcmaeonidae were laid.

⁵ *AA.*, 1938, p. 580.

⁶ *Fouilles*, v, p. iii.

⁷ *Tiryns*, iii, p. 215.

know to have been situated on the Cadmeia, the Acropolis of Thebes.¹ The statement in the *Odyssey*² that Athena on leaving Scherie went to Athens and entered into the strong house of Erechtheus looks like evidence of a similar situation. The foundations of a Mycenaean building, certainly some part of a palace, underlie the area subsequently occupied by the Erechtheum and the Old Temple of Athena.³ It is unfortunately impossible to date the destruction of the palace, but there are no subsequent architectural remains above it earlier than the foundations of the Old Temple, which were laid in the late seventh or more probably the early sixth century; later in the sixth century the building was enlarged and elaborated, presumably by Peisistratos or his sons. Earlier foundations may of course have been cleared away by the builders of the Old Temple, but the palace can hardly have been superseded by a temple earlier than 800, if so early. So long as there was a king of Athens, he must have lived on the Acropolis and certainly on no other part of it than that on which the Erechtheum subsequently stood. It seems a fair assumption that the Mycenaean palace is the strong house of Erechtheus and his successors, and that it remained in use long enough to be known at least by repute to the poet of the *Odyssey*. He apparently also knew the position of Athena as tutelary deity of the ancient Tetrapolis; there is no other reason for making her go to Athens via Marathon, its most important member, where she had a sanctuary doubtless often visited by Ionian mariners. There is no question here of a Bronze Age situation preserved in epic; Athens stands outside the epic tradition. The line and a half—it is not a case of an inorganic line or distich—have sometimes been regarded as an Athenian interpolation, and sometimes as a proof that the *Odyssey* is an Athenian poem. The passage can hardly be an interpolation, since the state of affairs it implies in all probability ceased to exist little if at all later than the probable date of the composition of the *Odyssey*—say c. 700; unless, indeed, we assume that the Mycenaean palace continued to serve as the official quarters of the archon basileus until the building of the Old Temple. In that case, however, the passage must be earlier than the Athenian entry in the *Catalogue*, in which that temple is recorded. There is no plausible motive here for an Athenian interpolation, and it seems more natural to regard the irrelevant allusion—inconsistent too,

¹ ix. 16. 5; Xen. *Hell.* v. ii. 29. The language of Pausanias seems to imply that he saw the temple; whether it incorporated any vestige, real or reputed, of the Bronze Age structure we cannot tell; it may well, like the temple of Tiryns, have rested in part on the original foundations. The house of Cadmus was certainly not the burnt palace excavated by Kernanopoulos, which was not rebuilt (*PW.* v A 2, art. 'Thebai', col. 1436). It has been plausibly suggested that the fire which destroyed that temple was caused by lightning and that the site became an ἀβυσσος. A later palace is supposed to have been erected elsewhere, but of course on the Cadmeia. The burnt palace was apparently known by repute at least to Euripides (*Bacchae*, 594 ff.).

² η. 80-1.

³ Holland, 'Erechtheum Papers', *AJA.* xxviii (1924), pp. 1 ff and 142 ff., and pl. vii.

since elsewhere in the *Odyssey* Athena has no home but Olympus—as the tribute of an Ionian poet who had knowledge of the city and had very likely visited it. It may be remarked that the only other Athenian locality mentioned in either epic is Sounion,¹ a sailing mark and probably a port of call for the ships of Nestor and Menelaos on their homeward way from Troy. In any case we have here a testimony, unique in epic, to the continuity in one instance of the royal cult with that of the nascent polis.

Passing to the proto-Geometric age, we may reasonably conjecture that its cult was wholly or virtually aniconic and was often concerned with those sacred stones of which a number survived in the latest classical age, identified with, e.g., Herakles at Hyettos, Eros at Thespiæ, the Charites at Orchomenos,² and Zeus Kappotas in Laconia,³ while at Pharaï in Achaia some thirty of them were worshipped under divine names.⁴ Some of these cults may for aught we know go back to the beginning of the Bronze Age or even to the Neolithic Age in Greece; others may have appeared in fresh places owing to the intrusion of new and primitive populations. Thus to a band of Ainianes from Cirrha, who ousted the Inacheis and Achæians from their territory by the Inachus, Plutarch⁵ attributes the worship of a stone to which they owed their success. The cult, however, may have been indigenous and older than the story about it. To the proto-Geometric period we may also reasonably ascribe that worship of tree-trunks, logs, and planks of which records emerge about the end of the Geometric age.

Our earliest Geometric material consists in the fragments of house or, more probably, temple models from the Geometric temple of Hera Akraia at Perachora, and in the foundations of the temple itself.⁶ The fragments come from at least four specimens, of all of which it was possible to say that they were apsidal, as was also the Akraia temple itself. One certainly and all probably had a thatched roof. They are earlier than the middle of the eighth century and may go back to its beginning or even to the ninth. Since their ground-plans agree with those of the temple in which they were dedicated, it may reasonably be assumed that the similarity extended to the roofs and that the Akraia temple was thatched. Thatching is in any case the simplest method of roofing a round, elliptical, or apsidal building.

The temple of Hera Limenia, also at Perachora,⁷ was built about the

¹ γ 278, where it is described as ἀπορὶ Μῆρινον. Marathon was the principal place in the very ancient territorial division known as the Tetrapolis, which in the fourth century, though not even an administrative unit, yet maintained a certain religious cohesion. A fragmentary religious calendar is preserved in an inscription of that date in which provision is made for regular sacrifice to Athena Hellotis. Von Prott, *Legg. Sac. Fasc. i*, pp. 46 ff., inscr. 26. Cf. Schol. *Od.*, ad loc., and Schol. *Pind. Ol.* xiii. 55 a; Steph. *Byz.*, s.v. *Τερπνολίς*. In early days such a festival might well bring Ionians to Marathon as well as to Athens. In the *Odyssey* it implied that certainly Sounion and probably Marathon have undergone *συνεοσυσμός* with Athens.

² Paus. ix. 24. 3; 27. 1; 38. 1.

³ *Ibid.* iii. 22. 1.

⁴ *Ibid.* vii. 22. 4.

⁵ *Qu. Gr.* 13.

⁶ *Perachora*, i, pp. 28 and 34 ff., and pl. 8.

⁷ *Ibid.*, p. 113.

middle of the eighth century; it was rectangular, but was probably also thatched. The approximately contemporary model from the Argive Heraion¹ is rectangular and has a roof of a pitch so steep as to suggest thatch or shingling.

The apsidal house is of course no novelty in Greece. It is known in Thessaly;² it appears at Orchomenos in the EH period³ and at Thermon⁴ (Megaron A) far up in the second millennium; at Korakou⁵ in the same period it is definitely associated with the MH culture. Megaron B at Thermon is not apsidal, though the back wall has a distinct outward curve and the side-walls a slighter one;⁶ the colonnade, however, which was erected round it in the eighth century and certainly marks the sacred character of the building at that date, is truly apsidal. The small finds from Dörpfeld's group of prehistoric apsidal houses at Olympia have not been published, but there is no mistaking his description of a Mycenaean sherd of a late type,⁷ and this at least provides a stepping-stone between the Middle Bronze Age and 800 B.C. No doubt part of the population of Greece lived in such houses throughout the entire period, especially, we may assume, in the north, north-west, and west; but the renaissance of which we become aware c. 800 is surely to be associated with the intrusion of the Dorians and north-west Greeks into the Peloponnese.

From the beginning of the Bronze Age onwards, however, there had been a distinct building tradition in Greece. In the Peloponnese such EH buildings as we know (apart from the enormous round structure at Tiryns) are rectangular; our principal information comes from Zygouries, where ten houses, each of two rooms or more, were found to be of purely rectangular design. The roofs were of the type which was subsequently employed for the megaron at Mycenae, consisting of clay bedded on reeds and supported on branches or slender tree-trunks.⁸ Roofs of this sort were not flat, but admitted of a much lower gable than the more permeable thatch. They were by no means confined to the south, having been identified by Tsountas at Sesklo;⁹ *per contra*, rooms which may fairly be described as megara have been found on EH sites.¹⁰

¹ K. Müller, *AM.*, 1923, pp. 52 ff.; Oikonomos, *Eph. Arch.*, 1931, pp. 1 ff. The earliest temple of Artemis Orthia at Sparta is approximately contemporary and is rectangular. For a rectangular temple at Dreros in Crete of the same date see *AA.*, 1936, pp. 215 ff. At Antissa in Lesbos a Geometric apsidal building has been excavated which goes back to 800 or even further; it is not certain, however, whether it is house or temple (*BSA.* xxxvii, pp. 42 ff.). In the Athenian Agora, however, an undoubted house of Geometric date and oval ground-plan has come to light (*Hesperia*, ii, pp. 545 ff.). An elliptical model from Samos is, unlike the others, of stone, is of the sixth century, and at that date must represent a house.

² *Präh. Thess.*, p. 37, fig. 17. ³ Bulle, *Orchomenos*, i, p. 35. ⁴ *Deltion*, i (1915), pp. 231 ff.

⁵ *Korakou*, p. 77, fig. 110. ⁶ *Gr. and R. Architecture*, p. 55. The date is uncertain.

⁷ W. Dörpfeld, *Alt-Olympia*, i, pp. 81 ff.

⁸ *Zygouries*, pp. 6, 13, and 14.

⁹ *Διάρρη και Στενόδο*, pp. 79 ff.

¹⁰ See E. Baskin Smith, 'The Megaron and its Roof', *AJA.* xvi (1942), pp. 99 ff., and Dinsmoor's supplementary note, *ibid.*, pp. 370 ff. Baldwin Smith's statement that the Perachora models represent temples which had developed out of a house type that had long been customary in the Argive valley (p. 117) may be true, but lacks evidence.

It may be noted that Perachora, an outpost, at first insignificant, of Corinth, was Dorian and that the site yielded no traces of Mycenaean occupation. We may assume that the first settlers built the temple in the likeness of their own houses, and further, that it would hardly have been built if they had not left behind them a similar building at Corinth, where we are consequently entitled to assume a ninth-century temple built by men who also lived in apsidal houses. Such simplicity of life—for the apsidal house tends to maintain complete isolation—accords well with what we are told of the austerity of the early Syracusans; but change soon ensued at Perachora and presumably at Corinth. The rectangular model from the Argive Heraion comes from the region which had been the heart of Mycenaean culture in Greece, a culture whose architecture was purely rectangular, and in which the megaron of Tiryns had possibly been playing the part of a temple. However this may be, the triumph of the rectangular system was rapid and complete. The temple of Hera Limenia at Perachora, built c. 750 (the approximate date of the Argive model), at the opening of a period of greatly extended commercial relations, was rectangular; so, too, was the earliest temple, contemporary, if not earlier, of Artemis Orthia, at Sparta, another site where there was no previous Mycenaean occupation.

The earliest Heraion of Samos goes back to c. 800, possibly earlier.¹ The impulse to erect temples therefore, even if it originated with the Dorians and north-west Greeks, seems to have been fairly general throughout the Greek world, and is presumably one feature of the early development of the polis; it may well have been the sequel in many cases to the abolition of the kingship. Even if the royal residence continued to be the scene of the cult, the megaron must have been divested of its secular character. The king can no longer have exercised control over it; he might still have special functions and might enjoy some privileges, but only as the favoured tenant of a now resident owner. It may be surmised that to secure the permanent presence of the deity within the walls of the community was one of the main objects of the temple-builders. It is true that the Olympians, pan-Achaian in Homer, are found to be also pan-Hellenic; Athena Chalkioikos is honoured at Sparta as well as Artemis Orthia, Hera in the Argolid, at Corinth and on Samos; yet the members of each community must have felt that the deity of their choice was in a sense which we nowhere find in Homer *their* deity, and in some degree guaranteed the survival of their tiny state.

THE TEMPLE IN HOMER

Save that it ignores sacred stones and trees, Homeric cult generally conforms to, or at least does not conflict with, what we have inferred about Greek worship between c. 1100 and c. 800. Like the king, the deity

¹ Buschor, *AM.* lv (1930), pp. 1 ff. It is reported that subsequent excavation has shown the date of the first temple to be earlier than could be established by the evidence available in 1930.

possesses a temenos and altar,¹ perhaps an ἄλσος as well, as he continues to do in historic times, but with the few exceptions to be dealt with below, he has neither house nor cult-statue. On public occasions, such as the assembly of the fleet at Aulis, sacrifice is offered at an altar in the open air, in this case to all the Immortals.² Votives of a permanent character appear only in a single passage in the *Odyssey* (γ 274).

From the foregoing account of early temples it is clear that poets of the eighth century must have known them on both sides of the Aegæan, for the earliest Heraion of Samos is not likely to have been a unique example. It is therefore impossible to dismiss as interpolations all mentions of them in Homer, few as these are; each must be examined on its own merits.³

That the mentions are so few need not surprise us. No such cause existed as brought about at a much earlier date the intrusion of cremation into the heroic tradition. In a tale of war men must die and their bodies must be fittingly disposed of, but if events are told from the point of view of the invaders, they have little occasion to mention their own temples. In the *Iliad* (apart from the Athenian entry in the *Catalogue*) it is naturally those of the Trojans that find a place. There was not much inducement for the poet to introduce the rude and insignificant structures to which the models and the relics of early foundations alike bear witness; nor could any advance in architecture be made so long as thatching or shingling was the only method of roofing in use, as seems to have been the case at this date in north-west Greece and the Dorianized parts of the Peloponnese, for which alone we have evidence. Thatch and shingling necessitate a very steep pitch if the rain-water is to run off without soaking in, and thus the architectural possibilities are severely limited. The building must remain narrow or the height of the roof will become preposterous; its length, therefore, must also be inconsiderable. The gable-space is awkward and disproportionate; it offers no field for decoration comparable to the pediment whose tapering, elongated space affords, like a hexameter line, the opportunity for much delicate variation within strictly prescribed limits. An exit from the *impasse* was provided by the introduction, doubtless under Oriental influence, of the fire-baked tile, which first appears on Greek sites in the seventh century. It is true that baked tiles of a sort make sporadic and scanty appearances on Bronze Age sites from EH to LH III;⁴ but they are of so poor a quality that their use was probably

¹ θ 48, γ 148. For ἄλσος cf. ζ 291, which describes the ἄλσος of Athens on Scheria, where, despite the foundations of Nausithoos (ζ 10), she has no temple, and note the existence of a Ποσειδώνιος (ζ 266).

² B 305 ff.

³ It has often been remarked that whereas λαός, which belongs to the earliest epic vocabulary, never adopts the Ionian form λαῖς, λαῖς appears in the Ionian form only.

⁴ See Dinsmoor, *AJA.* xlv (1942), p. 372, for the complete list, which includes Tiryns (the Round Building), EH; Malthi (Dorian), MH; Asine (one doubtful instance), MH; Athens, north slope of the Acropolis, Thebes (secondary use in tombs), Berbati near Mycenae (partly in tombs), all LH III; cf. *AA.*, 1938, pp. 554-7. Dinsmoor regards the poor quality of the tiles as one reason why so few have been preserved. Cf. *Perachora*, i, p. 113.

restricted and certainly did not survive. Perfectly impervious, the seventh-century tile rendered possible a roof of gentle slope, with a consequent increase in width; the result was the pediment, and thus the classical form of the temple was inaugurated. Further, with the tile came a whole system of terra-cotta revetment—*simā*, *antefix*, waterspout, *akroterion*—moulded in graceful forms and richly and delicately painted. The human head as an *antefix* is one of the earliest *motifs*, and before the end of the seventh century gorgoneia and lion-head waterspouts have made their appearance. The house of God has become the central jewel of a polis advancing in wealth and culture—*ἀκάσκαλον ἄγαλμα πλούτου*. Of these developments Homer could know nothing, much less of the final step which remained to be taken. For a while walls of crude brick or rubble set on a few courses of stone persisted; then in the second half of the seventh century the temple built of dressed stone throughout begins to establish itself, and for the first time there are buildings worth making, literally, a song and dance about.

The first mention of temples in the *Iliad* refers to those which Chryses was apparently in the habit of building, or, strictly, roofing,¹ for Apollo. Do the words of the priest imply that he had done so at, say, Killa and Tenedos as well as Troy, or did he on the occasion of some recurrent festival² run up a booth of boughs, a *καλύβη* like the first temple of the god at Delphi?³ There is no mention of a temple when the Greeks arrive with the hecatomb of atonement, but in any case the foemen, *et dona ferentes*, would not be admitted beyond the limits of the shore. The question cannot be settled, and in any case the words in the mouth of a Trojan would not seem unnatural to an eighth-century audience.

The next allusion occurs in *E*, a book of many singularities, yet not, like *K*, isolated from its context. The narrative is carried on into *Z* without breach of continuity, and it is no less closely linked to *Δ*, which carries *Γ* with it. Wilamowitz even thought that the three books had formed a small epic which had had an independent existence before it was incorporated in the *Iliad*.⁴ Further, he pointed out that in *Γ* 230–42 use is made of themes which recur in the *Cypria* but find no place elsewhere in the *Iliad*, viz. the guest-friendship of Menelaos and Idomeneus, and the death (total or partial) of the Dioskouroi. That is to say, *Γ* drew on poetry in contemporary circulation for features which were destined to reappear only later. Similarly, *E* seems to have used exceptional sources, but of a different sort. While much of the book reflects the Ionian character in its lightest mood, other elements seem to be of Cypriot origin. The evidence which is largely linguistic will be discussed in the next chapter; here it is sufficient to note that in this book alone Aphrodite

¹ The verb *ἀρῶμαι* recurs only in *Δ* 450, where it means specifically to thatch, and in *ψ* 193, where the meaning is probably the same.

² Such as the *θεοφεία* elsewhere associated with Apollo. Paus. vii. 27. 4.

³ Paus. x. 5. 9.

⁴ Wilamowitz, *Die Ilias und Homer*, pp. 281 ff.

is called *Kúmpes*, nor does the epithet occur in the *Odyssey*, though her connexion with Paphos is recognized.¹ Its use in *E* may fairly be taken to associate with Cyprus the two episodes in which she is concerned,² though of course neither Aineias nor Ares has any connexion with the island. Incidentally, it is in these episodes that most of the peculiarities of the book appear, whether they are demonstrably Cypriot or not. In a Cypriot source the mention of a temple need not surprise us; from the time that the Phoenicians settled in the island, their temples must have been a familiar sight to the Cypriot Greeks. In the given context the word *νῆος* would not jar on the ears of the poet's audience.

Hence there is no reason to regard with suspicion the second reference to the same temple in *H* 83, even though it disturbs the precise symmetry of the provisions for the disposal of the arms of the vanquished, whichever he be, in the forthcoming duel; the allusion is probably deliberate, made by the poet to recall the episode in *E* and Hector's debt to Apollo. Such limited yet reiterated use of a source alien to his main theme is found in briefer compass in the introduction of Areithoos the Maceman in *H* 8 and the sad tale of his end in *H* 137 ff.

The case of the Athena temple in Troy is very different. There is no justification for the presence of the goddess in the city of which she is a bitter and consistent enemy and where she never again appears. When at the beginning of the next book she and Apollo meet outside the gates (*H* 19-21), he comes from the citadel where his temple is, she from Olympus. The *Supplicatio* in *Z* as it stands to-day bears obvious marks of having been tampered with. Temple and cult-statue appear together; first in the instructions given by Helenos to Hector (86-97) and repeated by Hector to Hekabe (269-78) and finally in the performance of the sacrifice (286-312). Here the narrative receives certain amplifications in the account of the robe brought from Sidon by Paris and Helen, an episode apparently modelled on her travels with Menelaos in the *Odyssey*, and in the introduction of Theano, daughter of Kisseus and wife of Antenor as we learn from *E* 70 and *A* 224, but nowhere else described as priestess of Athena. She holds her office by appointment of the Trojans, an improbable method of selection in a city governed by a king. No other priestess is mentioned in either *Iliad* or *Odyssey*.

A different account of his mission is given by Hector in his address to

¹ *θ* 362-3. The view of Wilamowitz (op. cit., p. 286) that *Kúmpes* cannot be identical with *Kúmpes* and that consequently we do not know what it means seems far-fetched. There is no doubt about the meaning of *Ἑλλήες*, though all other tribal names of this type have the circumflex on the penultimate—*Κεφαλλῆες*, *Αἰολῆες*, etc. *Kúmpes* may be an example of the retracted Aeolic accent of which the poems furnish several examples. See Chantraine, *Grammaire Homérique*, p. 194.

² The ascription of epic poetry in hexameter to Cypriots at a date which must fall at latest early in the eighth century (since *ex hypothesi* it precedes a predecessor of the *Iliad*) suggests that the Achaeans had carried the hexameter with them to Cyprus and preserved it there. See p. 466 *infra*.

the troops before leaving the field (113-15). He is going to tell 'the aged councillors and our wives'¹ to pray to the gods and, in the proper Homeric manner, promise hecatombs, and Hekabe on her first meeting with him (257) merely asks if he has come to hold up his hands to Zeus from the Acropolis.² Neither speaks of Athena. On these lines the original Supplication must have proceeded. The Athenian character of the substituted version and its close correspondence with the ceremonial of the Panathenaea in the offering of the peplos at Athens have naturally been remarked by every commentator. *γεραιάς*, another *ἄπαξ λεγόμενον*, is a corruption; the summons is not confined—why should it be?—to the aged women, since Hector (378-80) thinks it likely that Andromache has complied with it and joined her contemporaries. The ancient v.l. *γεραιάς* is certainly the true one. *γεραιά* or *γεραρά* was the title of the women appointed to assist the wife of the king archon in the worship of Dionysus at Athens; in historic times their function was probably more general.³ Further, the temple is unique in that it contains a seated cult-statue, one moreover of a size to receive on its lap the largest of Hekabe's robes. It is true that cult-statues go back almost demonstrably to the eighth century and that some of our most definite evidence relates to the seated type. Of the statue of Athana Lindia in Rhodes we have no direct knowledge, but its type was acutely divined by Blinkenberg⁴ in terra-cottas of the sixth and fifth centuries from Gela and Akragas. These represent a seated goddess wearing the diadem and necklaces recorded in the famous temple chronicle of Lindos among the possessions of Athana Lindia. The drapery is absolutely flat, which indicates a very archaic original, and some specimens have no arms,⁵ carrying us back a stage further yet in the development of the statue. Gela was founded by a mixed Rhodian and Cretan colony in 689, and Akragas was founded by Gela in 581. Presumably the terra-cottas represent the tutelary deity of both; and when we find the temple chronicle of Lindos recording offerings dedicated there by both these cities to Athana Lindia,⁶ to whom the Geloans give the unusual title of Patroia, we are justified in accepting the conclusion of Blinkenberg that both possessed copies of the cult-statue at Lindos. If this is so, then we have in the terra-

¹ *βουλευτάς* is a *ἄπ. λεγ.* for the normal *γέροντες* or *δημογέροντες*, but the *βουλή* is a Homeric institution; v. Leaf ad loc. The women would doubtless share, like the women of Nestor's household (γ 450-2), in any act of worship performed.

² This would be the natural procedure for any man addressing Zeus, who long remained a purely open-air divinity. See E. Kunze, *Antike und Abendland*, II, p. 101.

³ *ἑραταί κοινάς*, Hesych. s.v. *γεραραί*; the statement about Dionysus follows, with the further limitation that it was exercised *ἐν Ἀλαύῃ*. For a discussion of the passage and a list of the ancient authorities on *γεραρά* (*γέραια*) see W. Schulze, *Quaestiones Epicae*, pp. 501-3. It is sufficient to cite here Ps.-Demosth. *ἐν τῇ Νεαίῳ*, 73.

⁴ 'L'Image d'Athana Lindia', *Det. Kgl. Danske Videnskabernes Selskab*, 1917, especially pp. 25-32.

⁵ e.g. an example in the Ashmolean, Blinkenberg, op. cit., p. 27, fig. 4.

⁶ Blinkenberg, *La Chronique du temple lindien*, pp. 331 ff., chs. xxv, xxviii, and xxvii, xxx.

cottas the type of a cult-statue which was in existence in 689 and very possibly goes back into the eighth century.

This is not, however, the whole story. There was at Lindos a more primitive cult-object described by Callimachus as a *λεῖον ἔδος*,¹ i.e. a wholly or virtually aniconic symbol of the goddess, comparable to the *σάνις* mentioned in the same fragment which represented Hera of Samos. That the *σάνις* was erect is implied in its name and confirmed by the erect archaic statue, recorded on various coins,² by which it was superseded. Blinkenberg's conclusions that the original Athana Lindia, installed by the Dorian settlers, was a similar object and that Oriental influences are prominent in her seated successor are fully justified.

Hera at Tiryns provides a parallel case. Besides the small, seated image of pear-wood which Pausanias saw at Argos whither it had been transported,³ there was a *μακρὸς κίων*, tended, according to the *Phoronis*,⁴ by Kallithoe, i.e. Kallithuia, first priestess of the first temple at Tiryns. The evidence of a pit of discarded votives at Tiryns dating to c. 750 points to the existence of an eighth-century temple, preceding that of the seventh century of which one or two architectural members are extant.⁵ Kallithoe is described as *κληδοῦχος*, a clear indication that the *κίων* was inside the temple. It is legitimate to conjecture that it was the cult-object of the first, the seated image that of the second, which, as we have seen, was of the seventh century. Similar columns or tree-trunks, aniconic or perhaps very slightly humanized, are recorded elsewhere in mainland Greece: the *στῆλος* identified by the Thebans with Dionysus, according to an oracle quoted by Clement of Alexandria,⁶ the *πρέμνον ἐκκεκομμένον* of Hera Kithaironia,⁷ the *κίων* which Clement took to be Apollo himself in his temple at Delphi.⁸ The image of Artemis Orthia at Sparta seems to have been at least approximately anthropomorphic; it was small, light, and erect, if we may judge by the story of its discovery, held upright by the branches of the willow-thicket in which it was found.⁹ The small wooden Aphrodite of the Delians must also have been erect since it had a quadrangular termination in lieu of feet.¹⁰ That the standing cult-statue is older in Greece than the seated is certain, and that the latter was intro-

¹ According to the almost certain emendation for *λεῖον* which gives the opposite meaning. Callim., fr. 105. It is hardly necessary to say that *ἔδος* does not imply a seated statue.

² Roscher, *Lex. Myth.* s.v. 'Hera', cols. 2109-10.

³ II. 17. 5.

⁴ Kinkel, *EGF.*, p. 211, fr. 4. For the location of this temple of 'Argive Hera' at Tiryns see Frickenhaus, *Tiryns*, I, pp. 19 ff., and Jacoby's more thoroughgoing analysis of the literary sources in *Hermes*, lvii (1922), p. 366 ff.

⁵ *Tiryns*, iii, pp. 213-16; Schliemann, *Tiryns*, pp. 293, 295, figs. 122 and 123.

⁶ Clem. Al. *Str.* I. 418 Pott.

⁷ Id. *Protr.* iv. 4¹ Pott.

⁸ Id. *Str.* I. 419 Pott.

⁹ Paus. iii. 16. 10-11.

¹⁰ Id. ix. 40-3. The *περιόδουρον φερόν* dedicated by the Cretans at Delphi (Pind. *P.* v. 54) must have disappeared before the visit of Pausanias, who does not mention it. A statue made from a single tree-trunk is likely, however, to be erect.

duced under Oriental influence, possibly by way of Cyprus, can hardly be doubted.¹

As has often been argued,² the interpolation of the temple and statue in *Z* is the work of an Athenian, and consequently the date of the appearance of the seated Athena on the Acropolis becomes a matter of great interest. On the island of Rhodes, whose trade with Phoenicia and Cyprus began early and was fairly copious, the seated Athena Lindia can, as we have seen, be traced back to the confines of the eighth century, but only as the successor of an earlier cult-object which, whether or no it possessed any human traits, was at least erect.

Knowledge of a seated goddess as an art type can be detected at Athens in a cult-scene depicted on the Dipylon cylix of the eighth century already referred to.³ A figure, certainly female, of which the upper part is missing, is seated on a throne of Assyrian type with a footstool; it is true that the women with linked hands who approach her are Greek,⁴ but the pair of winged human-headed horse-demons which appear in the other half of the circle originate in Assyria or Babylonia and cannot be paralleled nearer home than Cyprus, and there but imperfectly.⁵ The artist is inspired by some foreign model, probably Cypriot; there is no reason whatever to suppose that he meant to depict an Athenian cult-scene.

A second Geometric monument presumably also drew its inspiration from the East. This is an unpublished terra-cotta figurine in the Ashmolean Museum; it represents a seated female who may be a goddess, but is not a cult-image and cannot be regarded as evidence of a contemporary cult-statue at Athens.

When we turn to the literary sources, the case for the greater antiquity of the standing type of Athena is overwhelming.⁶ That in 480 the cult-statue was removed from the Acropolis to Salamis and so escaped destruction appears in a passage derived by Plutarch from Clidemus;⁷ it must therefore have been known to Athenians of the succeeding generation. Euripides and Aristophanes testify that it was armed, i.e. a

¹ At Troy, however, the only cult-statue of which we have any evidence is the standing figure found on the coins of the city. The series begins before 300 B.C. There is therefore no reason to suppose that the passage records actual conditions at Troy.

² Most recently by Bethé, *Homer*, II, pp. 314 ff., with a characteristic wealth of ingenuity and learning, of which use has been made above. His conclusion, however, based on the Athenian traits in *Z*, that the *Iliad* as we have it is the work of an Athenian who produced it in the sixth century or at least not before 600 does not commend itself.

³ *AM.* xviii (1893), p. 113, fig. 10. For the throne cf., e.g., P. et C. II, p. 107, fig. 28.

⁴ See Kunze, *KBR.*, pp. 312 ff., and P. et C. III, p. 673, fig. 182 = *KtB.*, p. 107, 5.

⁵ e.g. P. et C. III, p. 707, fig. 519.

⁶ In spite of Frickenhaus's arguments on the other side, *AM.* xxxiii (1908), pp. 17 ff. He proves indeed by means of temple inventories of the fourth century which record the attributes and ornaments of a cult-statue of Athena in the ἀρχαῖος ναός that it corresponds to the seated goddess as represented in terra-cottas of the Acropolis (v. *infra*) and, less precisely, to some two or three representations on black-figured vases of c. 500. As Frickenhaus points out, the question is fortunately not complicated by that of the ἀρχαῖος ναός.

⁷ *Val. Them.* x.

Palladion;¹ Euripides mentions the round shield extended over the head of the suppliant, an attitude possible only if the figure was erect; Aristophanes adds the epithet Polias. This is the image which Pausanias saw and of which he tells us that it was much the most sacred on the Acropolis, that it was dedicated many years before the *συνουσιασμός*, and that it was reputed to have fallen from heaven. Plutarch, referring to it as that of the Polias, says that it was of wood and had been erected by the *αὐτόχθονες*.² Athenagoras,³ a Christian philosopher contemporary with Pausanias, enumerates side by side τὸ ἀπὸ τῆς ἐλαίας τὸ παλαιὸν and τὴν καθημένην; the first-named therefore was erect. No doubt Athenagoras, like Pausanias, had seen it, and no doubt every Athenian knew what it was like. We can form an idea of its appearance from a Palladion on a proto-Corinthian aryballos,⁴ the earliest example extant. The vase unfortunately cannot be precisely dated, but is at least earlier than the middle of the seventh century; the type of the image is probably much older. It may even have come down in unbroken descent from that of the goddess of the figure-of-eight shield as depicted on the LH III limestone tablet from Mycenae; for to hang a shield on a log or tree-trunk and even to give the latter a few human traits would not be beyond the powers of a proto-Geometric worshipper.

For the seated Athena at Athens there is no evidence earlier than the second half of the sixth century. A group of closely related terra-cotta figurines of that date found on the Acropolis⁵ represents a seated female figure; though some few are characterized as Aphrodite or other goddesses, some have the aegis or Gorgoneion and, having regard to the place of their discovery, the bulk may be safely regarded as Athena and as reproductions of a seated cult-statue on the Acropolis. The dress is frequently Ionic. Further, there is the seated Athena of marble by Endojos which Pausanias saw and which is with virtual certainty to be identified with a well-known figure in Ionic dress in the Acropolis Museum.⁶ This cannot be precisely dated but falls in the second half of the sixth century, possibly in the decade 550-540. A private dedication, it probably stood in the open air and cannot have been the cult-statue which inspired the terra-cottas; this, however, may have been a work by the same master. Like the terra-cottas, the marble figure exemplifies that Ionian influence which first manifests itself at Athens c. 550 and characterizes the whole second half

¹ *Eur. El.* 1251-7; *Aristoph. Birds*, 826-31. *Arich. Eum.* 79-80 and 258-60 at least support the idea of a standing image, since the suppliant can wind his arms round it. To these passages may be added Plato, *Critias*, 110 B, first adduced by E. Petersen, *Die Burgtempel der Athena*, p. 41.

² *De Doed. Plat.*, Bernardakis, vii, p. 49.

³ *Apol.* 17; cf. *Paus.* i. 26. 6.

⁴ *JHS.* xxiv (1904), p. 295; Johansen, *VS.*, pl. xx. 1 a and b; cf. Payne, *Necrocorinthia*, p. 8, no. 2.

⁵ Farnell, *Cults of the Greek States*, i, pl. xv a. See also pp. 331 ff. for a full statement of the case and references to the ancient authorities.

⁶ For the most recent and satisfactory reproduction see Payne and Young, *Archaic Marble Sculpture from the Acropolis*, pl. 116 and p. 46 f.; cf. *Paus.* i. 26. 4.

of the century. This is the period in which the Athena temple on the site of the old Mycenaean palace, first built c. 600 or a little later, is elaborated and embellished, whether by Peisistratos himself or by his sons. The occasion seems eminently suitable for the dedication of a cult-statue which embodied the kindly and peaceful side of Athena's character, the type of which seems to have been sought in Ionia. The seated Athena is associated with east Greece: the examples enumerated by Strabo were at Phokaia, her colony Massalia, and Chios (the specimen at Rome being clearly the fruit of some imperial robbery),¹ and Pausanias adds one at Erythrai.² Strabo does not mention one at Athens, a strange omission, hardly explicable if it was in fact the ancient and original image; but the goddess of the ἀρχαῖος νεώς seems to have been a secondary and inconspicuous figure, at any rate in the fourth century. So at least we may judge by her meagre and unchanging wardrobe contrasted with the constantly replenished store of her neighbour, Artemis of Brauron.³

If we seek the occasion of an interpolation which on the archaeological evidence cannot well be earlier than 550, one of extreme plausibility presents itself in the final conquest of Sigeum by Peisistratos and the establishment there as tyrant of his illegitimate son Hegesistratos.⁴ The suggestion that even native deities had favoured his side might well be pleasing to the victor. Nowhere else in Homer is Athena associated with Troy and only here is she called *Ῥοισιάπολις*; indeed, the epithet occurs nowhere else in Homer. This is only what we should expect, for the conception of the polis which it implies does not belong to the world of epic.

The Athenian entry in the *Catalogue* (B 546-56) is no less palpably an interpolation, as the omission of all demes suffices to show, and is probably from the same hand. It is unfortunate that the person referred to by *μυ* (550) cannot be certainly determined. Modern commentators on the text (Leaf, Monro, van Leeuwen, Ameis-Hentze) follow the mistaken dictum of Schol. B ad loc. to the effect that only female victims were offered to

¹ xiii. 1. 41.

² vii. 5. 9.

³ Frickenhaus, *op. cit.*, p. 20. The original seated statue probably perished in the sack of 480, after which the martial type dominates.

⁴ Apart from the question of the seated Athena, this is a more probable date than that of the earlier war which gave Athens by the award of Pezander a possession of Sigeion which proved to be temporary. This war is roughly dated to 610-600; the Athenian leader at one stage in it was Phrynon (Strabo, xiii. 1. 38, 39), an Olympic victor in the pankration in 636. It is tempting to see in the mention by Alkaios (32 B., 49 D.) of *γλαυκώπιος ἱερὸν* (*sic*) as the temple in which his lost arms, subsequently seen there by Herodotus, were suspended, an indication of a specially close connexion at this date between the Athenion of Sigeion and the temple of Athena at Athens. It is true that at one time both the Acropolis and, more particularly, the temenos of Athena on it were known as the Glaukopion, but the name does not occur in the actual words of Alkaios as preserved in Strabo. The reading is certainly wrong, but has been variously emended; one suggestion is *Πλατωνίου ἱερὸν*, *Πλατωνίου* or *Πλατωνίου* are, however, at least equally probable. By the fifth century the use of Glaukopion to denote the Acropolis had been wholly forgotten. The word was resuscitated by the Alexandrians and used by Callimachus (fr. 66 f. Schneider, cf. Schol. Eur. *Hipp.* 31) and by Euphorion (*Berliner Klassiker Texte*, v. 1, p. 58). See E. Maass, *fb.* xxii (1907), pp. 143 ff.

female deities. There is some justification for their view, for though there are exceptions to the rule, only one is recorded in the case of Athena. At Iliou in the second century B.C. sacrifice was offered to her *βοὶ θηλεία καὶ προβάτω ἄρρενι*.¹ For the Athena of the Parthenon the point has been decided so far as the fifth century is concerned by the new fragment of a tribute list published in *Hesperia*, xiii, pp. 1 ff.² Here for the first time the much disputed victim contributed by each city of the Athenian empire on the occasion of the Panathenaia is revealed as a cow accompanied by the somewhat incongruous offering of a panoply. To maintain, however, that male victims had never been offered to the goddess at Athens is to go beyond the evidence; whence, we ask, did the Scholiasts on Aristoph. *Nubes* 386 get their notion that the Panathenaic victim was an ox? Pausanias says (i. 27, 10) that Theseus sacrificed the Marathonian bull to Athena;³ it is unlikely that this is a later version than that of Plutarch (*Thes.* 14) and Diodorus (iv. 59) who say that it was offered to Apollō. In view of the close connexion of Boeotia and Attica in early days, the well-known sixth-century Boeotian lekane in the British Museum⁴ deserves attention. The sacrifice depicted on it can no longer be regarded as that of the Panathenaia, for the lekane is but one of a series on which scenes of festival are represented which can have no connexion with Athens. It is, however, a sacrifice to Athena, erect and armed, and the victims (bull and goat) are unmistakably male. So too are the worshippers, though a priestess officiates.⁵ These indications justify us in associating male victims with the martial type of Athena as late as the sixth century, and in taking *μυ* to refer to her, to the great improvement of the sense; if Erechtheus is meant, the allusion to the city's guardian deity is extraordinarily cursory and jejune. Besides an amphora (n. 3, *supra*), we have evidence for an Athena Promachos of a much more advanced type than the Palladion image of the proto-Corinthian aryballos, the type to which the original image at Athens must have approximated, in the series of Pana-

¹ Michel, *Recueil des inscriptions grecques*, p. 626, no. 731; cf. Robert, *BCH.* lli, p. 158, n. 3.

² Lines 41-2, p. 6; cf. p. 13, n. 23.

³ We may compare the scene on a black-figured vase published by Gerhard, *AV.* pl. 135, in which Herakles, introduced by Hermes, appears before an Athena of the Palladion type. Behind the goddess in the second plane a small bull, doubtless the Cretan, paws the ground.

⁴ *JHS.* i, pl. vii; *Muz.* 166. Cf. A. D. Ure, *JHS.* xlix (1929), pp. 167-8. Many have supposed the scene to represent a sacrifice at the Panathenaia, but now that the vase has been given its place in a long Boeotian series, this appears improbable. We might expect the goddess to be equipped with the Boeotian shield, but the round shield is regular in conjunction with the Palladion.

⁵ It is interesting to compare a black-figured Attic amphora of c. 550 B.C. (Gerhard, *Eir. u. Camp.* *Vasenbilder*, pls. ii and iii). The sex of the victim (cow or bull) is not revealed, but we have again the erect, armed Athena, the priestess, and a group of young male worshippers only—i.e., of *αἰῶνα*. The fact that the three on the obverse are male has at first sight no significance, since they are there to control and slay the victim and there is no room for more; on the reverse however the scene is carried on in the persons of two flute-players and two lyre-players, all men. The obverse is reproduced by Farnell (*Cults*, i, pl. xv, c); xv, a gives a typical example of the contemporary seated figurine.

thenaïc amphorae which begins rather below the middle of the sixth century and certainly marks the new importance of the Panathenaïc festival. There is much to be said for the attractive conjecture of Brauchitsch and others¹ that Peisistratos dedicated a statue of this type to be specially associated with the contests. The tyrant may well have celebrated the culminating and triumphant period of his authority by the erection of two 'modern' statues to the goddess who had appeared in martial array to secure his first restoration² and had crowned his latter years with peace and prosperity. We have, then, evidence that there were two cult statues of Athena at Athens, one seated and not earlier than c. 550, another erect, more ancient, always revered and enjoying special regard at the same date in connexion with the reorganization of her supreme festival. The entry in the *Catalogue* would emphasize the warlike aspect, introducing possibly a veiled compliment to Peisistratos in the extravagant eulogy of Menestheus, the remodelled Supplication would stress the peaceful and kindly character. Both interpolations are Peisistratean and for both a natural motive can be found; the interpolations were probably introduced simultaneously into the city's official text of the *Iliad*.

The temples of the *Iliad* are now disposed of with the exception of that of Apollo at Pytho, which cannot be dealt with till the mention of it in the *Odyssey* has been discussed. In the *Odyssey* their appearance is not more frequent, but they are assumed as part of the ordinary furniture of life. The account of the settlement of Scherie by Nausithoos (ξ 9-10) might be that of the founding of any contemporary Greek colony, for if Perachora had a temple from the date of her foundation before 800, it is a safe assumption that Syracuse had one in 734, Naxos in 735, and Leontini in 729. In any town the temple of its special protector, like the Poseidon of Scherie, would be a central point and a landmark for strangers (ξ 266). Aigisthos offers votives as well as burnt sacrifice; the verb (ἀνθήσειν, γ 274) is self-explanatory and no building is mentioned. The companions of Odysseus, when they decide to eat the cattle of the Sun, vow to build him on their home-coming a rich temple with many and splendid votives (μ 346-7); which suggests how subsidiary cults might gather round the indigenous worships of a polis.

There is no ground for suspicion in Agamemnon's visit to the oracle of Apollo at Pytho (θ 80), for the abundant Geometric sherds on the site of the temple show that it was a place of resort in (at latest) the eighth century, when far less important places either already had temples or were building them. Moreover, the specific mention of the stone threshold suggests that the day of the stone-built temple was not yet.³ Further, we

¹ *Ib.* iii (1937), p. 77.

² Herod. i. 60.

³ Homer's temple must have been older than that of the Keledones (Pind. *Paeon* xi), though that also would seem to have been only partially of stone; its orthostats have been found built into neighbouring structures (*Fouilles de Delphes*, ii. 2, p. 190). Golden Keledones as akroteria are not to be looked for before the seventh century.

learn from Herodotus¹ that a temple existed in the lifetime of Midas the Phrygian, who dedicated to Apollo a throne which would not have been offered unless there had been a building for its reception. If we admit the generally accepted identification of Midas with the Mita of Assyrian records, he flourished in the latter part of the eighth century and perished in the Kimmerian invasion of c. 696. The most probable date for the dedication would be when his power was most widely extended, and reached into Cilicia, whence he was expelled by Sargon II in 715. The clumsy adaptation of the line in *I* 404-5 is a different matter. That these lines are an interpolation is clear from the allusion to the great wealth of the temple, a wealth which only came into being with the dedications of Gyges in the first half of the seventh century. This is implied in the account given by Herodotus and expressly stated by Phanias of Eresos and Theopompus,² who say that till then there was neither silver nor gold in the treasury of the god. The awkwardness of the verb *ἐέπει* in this context has often been noted; it is accounted for as the unhappy expedient of a rhapsodist.

For this interpolation we have a parallel in the introduction of Egyptian Thebes into the same book,³ very possibly by the same hand.

Apart then from the unmistakable interpolations which have been discussed, the allusions to temples in the epics are only such as we might expect from a poet of the eighth century. They are indeed inconsistent with the Bronze Age convention, but not more so than the mentions of cremation, an earlier intruder into the heroic world.

It is perhaps unnecessary to raise the vexed question of the Locrian Maidens; yet it seems desirable to put on record the serious or rather the fatal objections to the date maintained by Wilamowitz for the institution of the tribute, viz. in the reign of Croesus (*Die Ilias u. Homer*, pp. 379 ff.). His ingenious explanation of the opposition of the Trojans to the entry of the maidens by the hypothesis that they were hostile to the Greek settlers of the coast and objected to the intrusion of foreigners into their sanctuary may be correct; but the further hypothesis that in the sixth century the Delphic oracle gave its instructions in complete ignorance of local conditions is incredible. Such circumstances are conceivable in the eighth century, to which the Greek occupation of some part at least of the coast goes back, if we may judge by the presence of Geometric sherds in Hissarlik VIII; further excavation may of course carry it a little higher. A date not lower than the eighth century would accord with the passage in Polybius (xii. 5) on the descendants of the Hundred Families among the

¹ i. 14.

² Ap. Athen. vi. 231 E. The statement of Phanias is quoted from his work on the tyrants of Sicily, but this pupil of Aristotle may in his youth have worked on the temple inventory of Delphi as Callisthenes did on the Pythonikai and may have had records as good as those of Athana Lindia.

³ *I* 381 ff. *V. supra*, p. 97.

Epizephyrian Locrians, which Wilamowitz is obliged to dismiss as valueless (op. cit., p. 391; cf. Leaf, *Troy*, p. 134). Apart from this, his argument is difficult to accept; it is as follows. Z (in which he recognizes no interpolation), the *Iliupersis*, and the *Nostoi* all assume the existence of an Athena temple in Ilion; all are earlier than the reign of Croesus. It is therefore owing to their influence that when the half-Hellenized inhabitants of Ilion built their temple, they dedicated it to Athena. It may be observed that the image in that temple, the Athena Ilias to whom Xerxes paid his famous visit, was a Palladion, as Wilamowitz himself admits. Z therefore had no part in determining the character of the cult-image, a point which Wilamowitz ignores.

If the sixth century is indubitably too late, there is, on the other hand, no question of carrying the tribute back to the Bronze Age. It may be conjectured to have had its origin in some definite event, presumably the violation of some native shrine which occurred in the course of the warfare, probably prolonged and desultory, by which the Greeks established themselves in the Aeolid. In time it may have become the subject of a heroic lay and the victim may have been transformed into Cassandra. Such transformations are not uncommon in ballad poetry, where the anonymous lady of one version becomes the Earl of Mar's daughter in another. Ultimately the motive found its way into the *Iliupersis*.

CHAPTER VIII

CONCLUSIONS

I. THE COMPOSITION OF THE *ILIAD*

OUR review of the material civilization depicted in the Homeric poems has led us to the conclusion that while features of Bronze Age culture are undoubtedly preserved in them, these are much less considerable than was at one time supposed. It was an inevitable result of Schliemann's excavations and their astounding success that the extent of the Bronze Age tradition was exaggerated, nor could there be any effective criticism until the relevant chronology had been explored. For this task the epoch-making excavation of Knossos afforded the material; and the revelation—not of course reached in a single stage—that the Shaft-graves preceded the destruction of Troy VII A by some three centuries, while half a millennium separated the Warrior vase and kindred productions from the body of evidence provided by Late Geometric vase-painting, brought home to students of the subject the need for a drastic revision of Reichel's conclusions. We have seen his almost ubiquitous body-shield reduced to two appearances¹ and found that between the date of the Warrior vase in the second half of the thirteenth century and that of the battle-scenes depicted on Late Geometric vases the changes in arms and equipment were few and for the most part not such as would necessarily be recorded in verse. The chariot, the chiton, the round shield, and the slashing-sword were all there; after the close of the Bronze Age there is only one change of major importance, viz: the substitution at a date at present undetermined of a pair of throwing-spears for the single heavy thrusting-spear, and in Homeric warfare the pair of throwing-spears is normal.²

Yet unmistakable traces of the Bronze Age tradition survive. Besides the allusions to the body-shield we have Nestor's cup, which finds a closer (though far from precise) analogue in the Dove cup from Shaft-grave IV than in any later monument. The technique of metal inlay which produced the Shield of Achilles was practised in Greece in the Late Bronze Age, disappeared before its close, and apparently never revived there.³ Some, though by no means all, of the subjects portrayed on the shield have behind them a tradition which goes back as far.⁴

More conclusive evidence, however, than any of these afford is to be found in *K*, in the passage describing the boar's tusk helmet. This gives

¹ *O* 645-6, *E* 204-5.

² See p. 258 *supra*.

³ Payne, *NC.*, p. 85.

⁴ *JHS.* xlix (1929), pp. 146 ff.

us by far the most certain and satisfactory account to be found in the poems of an object which demonstrably did not survive the Bronze Age. No one understood the description till Reichel, carefully following its instructions, reconstructed from the pierced and graduated slivers of tusk found in so many Bronze Age tombs a helmet which conformed to the epic description in every respect. For the peculiar fidelity of the *ἐκφρασις* a cause is perhaps to be found in the fact that the poet of *K*, though by no means without merit, is not 'Homer' and does not work after his manner. It is difficult to imagine Homer transmitting a description of an object which he could not visualize; in fact we are probably indebted to the mighty innovator for the loss of much traditional material which the poet of *K* would have sedulously preserved. For four centuries at least no one could possibly have seen a boar's tusk helmet; only in the amber of traditional poetry handed down with an astonishing verbal fidelity could its image have been preserved.

Not less valuable as evidence is the consistency with which the fiction of bronze weapons is maintained throughout the poems. As we have seen, bronze weapons had been superseded by weapons of iron all over the Aegæan area not later than the eleventh century; this much at least we have learned from the cemeteries of the Kerameikos, of Vrokastro, Kavousi, and others in Crete, of Assarlik on the Anatolian coast, and from the solitary grave on Skyros. The convention of bronze weapons in heroic poetry must have been maintained by generations of men who in battle never handled anything but swords and spears of iron. In the period, however, of something under a century which separates the destruction of Troy VII A from the collapse of Mycenae, and probably for a little longer, weapons were still of bronze, and in the heroic lays on themes drawn from the Trojan War which must have begun to circulate immediately on the return and dispersal of the army only bronze could figure. When within a century of the fall of Mycenae iron was fully established, there would at first be no impulse to make a change in the poems, since bards and audiences were alike aware that they were dealing with a past already of some remoteness and that iron weapons were a newfangled invention.

Subsequently sentimental conservatism would no doubt play a part, but hardly suffices to explain the toughness of the tradition. It is best accounted for by the supposition that the hexameter or at least some form of proto-hexameter was established as the vehicle of heroic poetry not later than the great age of Mycenae and that the *aoidoi* of the age of transition felt unequal to the task of remodelling so much of their stock-in-trade in terms of a metal whose name was not a metrical equivalent of *χαλκός*. Of course this does not mean that all or even many of the lines in which bronze weapons are mentioned are direct legacies from the

¹ I.e. the poet of the main body of the *Iliad*.

Bronze Age, though there is no reason why some formulae should not have survived; what is certain is the continuity of the tradition. Pindar himself makes a gesture to it when on heroic occasions he refers to iron as *πολλὸς χαλκός*,¹ reserving ferrous epithets for contemporary warfare.² The discovery of graves containing bronze weapons, which must have occurred frequently and is occasionally recorded by ancient writers,³ would give reality to what might appear to ourselves no more than a tedious and artificial convention. Nor must it be forgotten that the helmet continued to be of bronze and that the plate corslet and greaves were of bronze from the date of their introduction onwards.

To the Bronze Age survivals in the material culture of the epics we may add two of a different nature in examples of geographical knowledge which can hardly have been acquired at a later date. The first is the allusion to Egyptian Thebes and her wealth, a case which hardly admits of doubt. The second is the account of the battle on the Sangarios against the Amazons in which Priam as a young man had taken part.⁴ The battle is best explained as one element of the upheaval in which the Hittite empire perished towards the close of the Bronze Age. The mere knowledge of the name of the river, which occurs again in *Il* 719, has no significance; it would no doubt become known to the Ionian immigrants soon after their arrival. As we have seen, Gordion had trade relations with the Ionian coast before the end of the eighth century; but the story of a martial adventure by Trojans in that region would hardly originate with the Ionians, nor is it likely that they picked up any local tradition of so remote a past. It is just such intelligence as might be brought back to Greece by those Mycenaean settlers who towards the end of the Bronze Age abandoned their Anatolian seats and probably in many cases found their way back to the motherland.

The hypothesis that the hexameter is also a legacy of the Bronze Age may at first sight appear improbable and even wild. Yet the artificial and traditional character of the Homeric language and the intimate connexion of this feature with the metre have always been recognized, and consequently the fact that the hexameter is considerably older than the *Iliad* is accepted. It remains to be seen if anything can be done to fix the date of its origin.

¹ *P.* iii. 49; xi. 20. In the first passage the second weapon of war, *χερμαῖς ἐπὶ δρεβόλῃ*, adds a further nuance of epic atmosphere.

² *P.* ii. 2; *Nem.* v. 19.

³ *Plut. Vit. Thes.* 36. If the account is correct, this grave, which contained a spear and sword of bronze, should be earlier than the proto-Geometric grave on Skyros referred to above. The strong Mycenaean tradition observable in this latter must be borne in mind. Cf. *Herod.* i. 68; no bronze weapons are mentioned, but the words of the smith imply that iron was a novelty. In the *Iliad* iron is in ordinary use, as the similes show, though it is not the metal of war; it is perhaps on Homer's authority that of Hesiod's five γένεα that of the heroes is left ambiguous in the matter of metal.

⁴ *I* 184-90.

In a monograph on the origin of Greek metres Meillet¹ called attention to the remarkable limitations imposed on epic vocabulary by the fact that the hexameter line does not admit the sequence -ο-. This excludes certain forms of many words both common and essential—cases of nouns, parts of verbs—which have to be replaced by equivalents, generally derived from allied roots. To take a single instance only, in order to run the whole gamut of lamentation in all the moods and tenses desired it is necessary to draw on στενέειν, στενάχειν, στεναχίζειν, and στοναχεῖν. Such a state of affairs could not in Meillet's view have arisen if the metre had been a spontaneous native growth, but is just what might be expected if the Greeks had attempted to imitate a foreign model. When we reflect on the combination in the Greek language of Indo-European structure with a remarkably large alien element in the vocabulary, much of it obviously dating back to a very early stage in its history, and on the presence of certain inexplicable inflexional forms, it must appear that we could hardly expect music and verse-forms to remain unaffected by so intimate a union. Meillet does not attempt to date the process more closely than as falling between the Indo-European period and the beginning of the historic age in Greece.² K. Meister, who had reached much the same conclusion on this point as Meillet by a different line of approach, is more precise.³ Pointing to the fact that all the Homeric and most of the post-Homeric names of musical instruments are of non-Greek origin and that a number of the second class, as well as certain verse-forms, are undoubtedly Anatolian (specifically Lydian and Phrygian), he supposes the fusion to have begun with the first contacts of the Ionian immigrants with their new neighbours. However true the conclusion as regards the post-Homeric forms, its extension to the Homeric is unwarranted. There is nothing alien in the names of hexameter or ἑξάμετρον ῥυθμός by which the metre was known in antiquity, and though those of κitharis and φόρμιγγς are non-Greek, there is nothing whatever to connect either with Anatolia. The extreme antiquity of a stringed instrument and the double pipe in the Aegæan area must not be overlooked. With the latter we are not at the moment concerned; but the existence of a triangular harp in the Early Cycladic period is proved by two marble figurines of musicians found the one on the island of Keros, the other on Thera.⁴ In LM III the Hagia Triadha sarcophagus gives us a seven-stringed lyre approximating to the

¹ *Les Origines indo-européennes des mètres grecs*. Paris, Les Presses Universitaires de France, 1923. The argument recapitulated above is independent of Meillet's main thesis, for a criticism of which see P. Maas in *Deutsche Literaturzeitung*, 1924, p. 517, and 1925, p. 2481. Some of Maas's objections might be removed if the hexameter dates back to the Bronze Age.

² He inclines, however, to a late period, as appears from his disinclination to trace the ancestry of the Homeric epic farther back than an immediately preceding Aeolic epic (op. cit., p. 62).

³ *Die Homerische Kunstsprache*, Teubner, Leipzig, 1921; see especially pp. 58 and 227 ff.

⁴ *AM.* ix (1884), pp. 156 ff., pl. vi; Bossert³, 412-13 (Thera), 421 (Keros).

classical form, corroborated by a fragment of fresco from the palace on the same site; much earlier, however, than these are the MM II sealings from the Palace deposit at Knossos on which seven- and eight-stringed lyres are represented.¹ The LH III tholos at Menidhi yielded considerable fragments of the finely carved frame of an eight-stringed lyre, and other pieces from which it was possible to reconstitute a second, perhaps also eight-stringed.² A miniature bronze lyre was found by Tsountas in a LH III context at the Amyklaion.³ There were remains of five strings; Deubner found traces of two more,⁴ and as the piece is incomplete and the width indeterminate, there may have been an eighth.⁵

The familiarity of Mycenaean Greece with the lyre whose reappearance in Hellenic Greece is associated with the name of Terpander is thus fully established. The Greeks of the mainland, however, had not to wait till the seventh century for a lyre. In the valuable study quoted above Deubner shows that the Greeks of the Geometric age used a four-stringed lyre which appears in Late Geometric vase-painting, but which had probably in one form or another been in continuous use since Early Helladic days. The triangular, probably four-stringed, instrument of the marble figurines had presumably been brought from farther east by the Early Bronze Age immigrants and been spread by them over the whole Aegaeon area; it does not figure in Geometric art, but reappears in an elaborated form in red-figured vase-painting.

The fusion of Greek with the indigenous language, or rather, the adoption by the Greeks of a very large number of foreign words, must have been a natural and unconscious process. It is probable that the native music, especially if it introduced the invaders for the first time to a stringed instrument, exercised some influence on their songs and consequently on their metres, especially as the lyre or harp is a good instrument for marking

¹ *Mon. Ant.* xix, pls. i-iii; Bossert¹, 248-52 (sarcophagus); restored figures of lyre-player from sarcophagus and fresco, *P. of M.* ii, p. 836, fig. 552 a and b; Knossos sealings, p. 834, fig. 550. It should be noted that so far as can be learned from U. Koehler's account in *AM.* ix (cit. *supra*) there is nothing to show that the harps of the Early Cycladic figurines are, as Evans states, four-stringed, though it is probable enough that they were so in the imagination of the artist. Though the lyre was known in Egypt from the days of the XIIth Dynasty onwards, it is Syrian in origin (see Evans, loc. cit.) and must have reached Crete from that quarter. Since Evans's note was written, the discovery of MM II ware at Ras Shamra has shown where the necessary contact was made. Certain fragments of bone, terra-cotta, and stone found by Schliemann at Mycenae were taken at the time to be parts of a lyre and a flute. As they were not found in a shaft-grave, we have no comment on them from Karo (Schliemann, *Mycenae und Tiryns*, pp. 78-9, and figs. 127-9 and 130 a).

² Lolling, *Das Kuppelgrab bei Menidi*, pl. viii, 6; Stais, *Collection mycénienne du Musée National*, pp. 166-7.

³ *Eph. Arch.*, 1892, pl. 3, no. 5. Cf. pl. 4, no. 2.

⁴ *AM.* liv (1929), p. 194.

⁵ As Evans points out (p. 835 and n. 2, citing Gevniert, *Hist. et théorie de la musique dans l'antiquité*, i, p. 87), both the eight- and the seven-stringed lyres are doubles of the four-stringed, but the seven-stringed more strictly so, because in Greek music tetrachords succeeding one another had a tone in common.

rhythm; but clearly this is a matter of speculation only. Presumably the development, like that of the language, was spontaneous and undirected.

The process which ultimately produced the hexameter with its mixture of dialects, its highly artificial vocabulary, and its accompaniment on a somewhat elaborate instrument must have been deliberate and controlled by professionals, or, if that term is inadmissible, by experts. According to Meister it was begun and carried out on the coast of north-west Anatolia—i.e. by the Aeolic and Ionian Greeks after their settlement in their new homes, and this was apparently the view of Meillet also. Despite this high authority, it appears to ignore unduly an important element in the vocabulary of the Homeric poems, one which links it to the Arcado-Cypriot dialects and therefore to the Greek spoken by the Bronze Age Achaeans of the Peloponnese. We have seen that this tongue can have been conveyed to Cyprus only by the Achaean emigrants of the fourteenth century. Scanty as are the remains of the Arcadian and Cypriot dialects, the vocabulary of each contains in ordinary use a considerable number of words which are found in Homer (and generally in later poetry as well, where they simply form part of the stock poetic vocabulary based on Homer), but not in prose literature or prose inscriptions.¹ These words generally differ a little from their literary counterparts in form or meaning or both; it is certain that the vast majority of those which occur in prose inscriptions cannot possibly have been borrowed from Homer. They are relics of the earliest form of Greek speech of which we can form any conception, and their appearance in the alien Homeric dialect in poems composed centuries after the close of the Bronze Age is most readily explained as the result of an unbroken poetic tradition. This implies that that adjustment of the Greek language to a possibly foreign metre which ultimately produced the hexameter was made in the dialect of the Peloponnese, i.e. in 'South Achaean' and, as the archaeological evidence had already suggested, before the end of the Bronze Age. In no time or place did conditions more favourable for such a fusion ever exist. We have noted the formidable impact of the Cretan on the mainland culture, first manifested in the Shaft-graves and attaining its maximum in the succeeding period, when Minoan influence in the sphere of religion and ritual becomes apparent.² Though this influence may not have penetrated deep, its effects survived in some measure the fall of Knossos, as can be seen in the frescoes of Tiryns and Thebes, in which women are depicted performing ritual acts of Minoan type. Our evidence for the use of the seven- or eight-stringed lyre comes from LH III; as the lyre

¹ See C. M. Bowra, 'Homeric Words in Arcadian Inscriptions', *Classical Quarterly*, xx (1926), pp. 168 ff.; 'Homeric Words in Cyprus', *JHS*, liv (1934), pp. 54 ff. The following are typical examples: common to Arcadian, Cypriot, and Homer, *αἶσα*, *βόλαμα*, *δῶμα*, *ἔρταις*, *ἐδχαῖα*; common to Arcadian and Homer, *δοκηθῆς*, *κλειυθός*; common to Cypriot and Homer, *δωωγα*, *αἰθεοθαῖ*, *ἰδέ*, *αἰρέα*. All these examples are taken from inscriptions.

² *V. supra*, pp. 23-4 and 434.

itself must have been borrowed while Knossos still stood, it had made itself at home in Greece.

In the fourteenth century Mycenae was at her zenith; her court must surely have been a centre of literature and music as well as of material splendour. Here are the conditions required for a school of poets qualified to develop and maintain a poetic idiom for whose creation and maintenance alike a self-conscious and in a sense learned culture was indispensable. The *Iliad* can never have been developed out of popular poetry.

Though Mycenae was pre-eminent, and was the centre from which the culture of the Late Bronze Age radiated over Greece, it flourished in many places and spread north of the Isthmus as well as in the Peloponnese. In Athens, Thebes, and even Iolkos societies of wealth and culture existed in LH III; in Thebes and Iolkos they can be traced back into LH II. It is improbable that Athens lagged behind; excavation may yet afford the proof that she did not.

If we ask where that continuity of tradition is to be sought to which the archaeological evidence in the poems testifies, it is obvious that certainty is not to be looked for; there is, however, one region whose claims are worth pondering. Thucydides held that in early times the population of Attica was augmented by the influx of refugees expelled from their homes by defeat in war or by civil strife; the excavators of the Kerameikos have found confirmation of his statement in the great increase at the beginning of the proto-Geometric period of the amount of pottery found in the American excavations of the Agora.¹ From no quarter were refugees more likely to come than from the ruined seats of Achaian power in the Argolid, bringing with them no doubt traditions—and why not songs and poems?—respecting that war in which Attica seems to have taken an inconspicuous share, if indeed she participated at all.

In Athens herself there is no evidence of conquest or invasion. Either the invaders passed her by, as Thucydides thought, because her soil was too poor to be worth conquering, or, as her own legend told, she successfully resisted them. Yet the cemetery of the Kerameikos records one change in a vital matter—in a grave which links the sub-Mycenaean to the succeeding period the rite of inhumation is changed for that of cremation; and cremation continues without exception through the proto-Geometric and only gradually disappears in the Geometric age. So sudden and complete a change can hardly have been made except under foreign influence in some form, and its origin may be plausibly attributed to Achaian refugees from the Argolid. Such men would in all probability have seen the royal tholoi of the Argolid plundered and the bones of their kings cast out, and might well decide to secure their own graves in alien soil against a like fate. A tradition of cremation practised by the Trojans at Troy might also survive, considering the closeness of Greek connexions

¹ *Kerameikos*, i, p. 177; *Hesperia*, vi (1937), p. 1.

with the city till her fall, and with it that of cremation practised, as it probably was, by the Greek army on the Trojan plain; such survival is all the more likely if it was recorded, as it naturally would be, in heroic verse. The cremations of the Kerameikos are the earliest known on the Greek mainland. The cremation cemetery of Assarlik is approximately contemporary and, as stated above, there is some reason to think it a refugee settlement from Crete, probably at least in part Achaian. The Dorians subsequently perpetuated the rite in outlying settlements in Crete, Thera, and Rhodes, but in no part of the mainland did it gain a hold outside Attica and her neighbour Boeotia; we have seen that it is in fact extremely rare. Hence the extreme importance of the fact that in the one Geometric cemetery in Ionia known to us, that of Colophon, the sole rite is cremation. The pair of throwing-spears has also been noted as another link connecting Attica with Ionian epic; there is no evidence for their adoption in any other part of Greece and a certain amount for the continued use of the single thrusting-spear.

The derivation of Ionian epic through Attica from the Argolid offers a simple explanation of the presence in the Homeric dialect of so many Arcado-Cypriot, i.e. Achaian, words, a phenomenon for which it is otherwise difficult to account and which the linguists are inclined to treat rather lightly. Nevertheless, if the archaeological evidence is ignored, no other view is possible than that in which the linguists are agreed, viz. that Homeric epic is based on an Aeolic epic. They support their case by the argument that Achilles, the hero of the *Iliad*, had his home in a region of Aeolic speech: but its strength lies in the fact that virtually all the non-Ionic forms in Homer can be plausibly interpreted as Aeolic. If, however, we carry back the use of the hexameter in Attica to the proto-Geometric period (to go no farther for the moment), other explanations at once become admissible. There is no evidence that the change of $\bar{\alpha}$ to η in Ionic had taken place before the Ionian migration; in fact it is generally assumed that it had not. Nor is it probable that the digamma had disappeared. All 'Aeolisms' therefore in these two categories can be equally well explained as examples of primitive Ionic preserved by the exigencies of metre. Other non-Ionic features may be derived from Achaian. Thus $\kappa\epsilon$ is exclusively used in Cypriot, though it has been ousted from Arcadian by the Attic-Ionic $\epsilon\upsilon$.¹ This is a remarkable instance of the transference of forms which we shall do well to bear in mind, though in this case literary influence can hardly have played a part. Apocope of the prepositions occurs in Arcadian in the case of all those which exhibit the same feature in Homer (and in that of $\pi\epsilon\delta\acute{\alpha}$ as well); in Cypriot it occurs also, but is confined to the case of $\acute{\alpha}\nu\acute{\alpha}$ and $\kappa\alpha\tau\acute{\alpha}$.

On the other hand, the dative plural in $-\epsilon\sigma\sigma\iota$ is an Aeolic creation.

¹ Bechtel, *Die griechischen Dialekte*, I, p. 436; cf. pp. 372-3. Cf. P. Chantraine, *Grammaire homérique*, pp. 494 ff.

formed later than the *-ai* of primitive Greek.¹ The innovation spread to Boeotia and to certain members of the north-west Greek group of dialects and owing to its great metrical utility plays a considerable part in Homeric Greek. It supplies a termination of the hexameter ($- \cup \cup - \cup$) for a number of nouns which could not in the otherwise universal form of dative have appeared at all (*Μυρμιδόνεσαι, εἰλιπόδεσαι, ὠκυπόδεσαι, δαιτυμόνεσαι*), and a place in the line for datives of the form $--- \cup$, though in this case the primitive form often appears as an alternative (*ἀκτίων, ἀκτίνεσσιν, ε 479, λ 16*). Datives of the form $\cup \cup - \cup$ have a great vogue because they can either form the end of the hexameter or find a place before the trochaic caesura (*κορύθεσαι, μακάρεσαι, πόλλεσαι*) and in words of this type the alternative form is rare (*λιμένεσαι, λιμέσι, χαρίτεσαι, χάρισι*). On the other hand, datives in *-εσαι* of a form less accommodating are comparatively rare; thus *νήεσαι* occurs 27 times, *νήεσσιν* 9, *νήεσσ'* twice, *νέεσαι* thrice, *νέεσσιν* 6 times, and *νέεσσ'* once, as against the 175 appearances of *νησί*. It is evident that the frequency of the termination *-εσαι* in the poems is determined purely by the remarkable range of its metrical advantages and bears no necessary relation to the speech of the bards who took advantage of them nor to any special closeness in the connexion of the two linguistic groups in matters of everyday life. Once the device had been admitted, it would be adopted and its use extended by every aoidos. Nevertheless, the first introduction of the form can only have been the result of some contact between men of Attic-Ionic and men of Aeolic speech, and in view of the extraordinarily artificial character of the Homeric dialect it is a reasonable guess that these men were aoidoi. Such contact can be most easily imagined between Attica and her neighbour of Aeolic speech—Boeotia. No proto-Geometric or Early Geometric site has so far been excavated in Boeotia, but we have found cremation in the Late Geometric graves of Vranesi and this, in view of the distribution of cremation in contemporary Greece, implies elements common and almost peculiar to the cultures of Attica and Boeotia.

In the Bronze Age there must have been fairly close communication between the courts of the Argolid, Attica, Thebes, and Iolkos; only so can we account for the homogeneous character of their material culture. This culture we have seen to reach back to LH II, the crucial period for the fusion of Minoan and Mycenaean elements, at Thebes and Iolkos; the case of Attica is not yet proved, but she can hardly have been by-passed in view of the number of sites which exhibit LH III culture in its best phase (Athens, Menidhi, Spata). We may confidently hope that excavation will yet fill the lacuna. There must also have been a common element in the music and literature of these centres; it was in Attica that the remains of the eight-stringed lyre were found. If we accept the hypothesis

¹ The examples in the text are taken from P. Chantraine's analysis, *Grammaire Homérique*, pp. 204 ff.

of a Bronze Age tradition in the material civilization of the Homeric poems, then we can fix no chronological limit later than that period for the beginning of a poetic language of mixed vocabulary and even of mixed dialect; even in the fourteenth century the speech of Iolkos and Mycenae can hardly have been identical.

Even in the Dark Age there must have been some degree of communication, as the common features of proto-Geometric culture show, and that poetry did not wholly perish is proved by the preservation of the hexameter. To this the Attic Geometric prize-jug bears witness; literature also comes to our aid. Hesiod was probably born and certainly brought up in Boeotia. His education included the composition and recitation of hexameters; if he went abroad to acquire it, he can only have gone to Attica, since he assures us that he did not cross the sea. The *Theogony* is entirely in the Attic-Ionic tradition.

It is generally assumed that the presence of Aeolic elements in Homer is the result of contact in Anatolia between the Aeolic and Ionian Greeks. Until the dates of the two migrations are known¹—and excavation must some day reveal them—the probability of the hypothesis cannot be tested. It is permissible, however, to stress, first, the very small residue of forms certainly Aeolic in the poems, secondly, the opportunities in Greece for the slow formation before the date of either migration of a mixed poetic dialect, and finally the likelihood that in this the dominant Attic-Ionic element would tend to preserve useful forms of primitive Greek such as *ā* in appropriate places out of the conservatism natural in poetry dealing with the heroic past, but also perhaps because they remained current in the rest of the Greek world. For the affiliation of Ionian epic to Aeolic sources the evidence is too slender.

One remarkable circumstance emerges from our survey. All Greek poetry, both archaic and classical, all the great forms which the literature of Europe was destined to imitate and elaborate throughout the centuries, have their ultimate origin in those regions in which Creto-Mycenaean culture flourished in the Bronze Age and was not stamped out by the Dorian invaders. The Aeolic migration must have been based largely on the Pagasaean Gulf, and it is not fanciful to see in Sappho and Alcaeus descendants of the great families which in the Bronze Age had dwelt round its shores, owing allegiance to the lord of Iolkos. Of Athens, where autochthony was so proud a boast, and Ionia there is no need to speak. Even Boeotia produced Hesiod, after him a poetry of catalogue which the world willingly let die,² and the Shield of Herakles, of which its most

¹ Professor Blegen tentatively puts the initial date of Troy VIII A, in which imported Greek pottery (Geometric) appears for the first time, at c. 900 (*BSA*, xxxvii, p. 12); the presence of this ware, if it does not prove, at least makes probable the Aeolic occupation of the coast. Though the date cannot at the moment be regarded as precise, it cannot be very wide of the mark.

² The *Catalogue of the Ships*, much read in late antiquity, as Professor D. S. Robertson reminds me, is hardly an exception, since the attention it received was due to the position

recent editor (Mazon) justly says that it is one of the most mediocre of the works bequeathed to us by the ancients. Nor was Corinna a great figure, yet she testifies to the continuity of literary tradition of a sort when she passes the flickering torch to Pindar.

Only in Dorian Peloponnese do we find a gap, a period of complete sterility which naturally followed in the wake of a conqueror from beyond the pale, a sterility which yielded only to deliberate fertilization by Greeks of Ionian and Aeolic speech, returned too soon and endured ever after.

If we seek a *terminus ante quem* for the composition of the *Iliad* as we know it, the best archaeological criterion is afforded by the introduction of the hoplite phalanx and the substitution of its tactics for the loose unorganized fighting of the Homeric field.¹ The chief characteristics of the latter were emphasis on the personal prowess of the chiefs, their complete freedom to range all over the field, and the means whereby this mobility was attained, viz. the chariot. All these vanished at a stroke. It is of the essence of the hoplite that he existed only as a unit of the phalanx; isolated from his fellows, he was lost. The shield of the Old Army had a single central hand-grip by which the owner could swing it to protect any part of his person (οἷδ' ἐπὶ δεξιᾷ, οἷδ' ἐπ' ἀριστερὰ νομήσαι βῶν²); it was slung by a telamon and, flung behind the owner's back when he turned to run, was as great an asset in flight as in attack, quite apart from the chance he had of being picked up by his chariot. When he had gained some ground, he had the further chance of keeping his pursuers at long range with his throwing-spears, especially if he reached his chariot and it contained a supply of ammunition. The hoplite's shield had no telamon and was carried on the left fore-arm, which was passed through an armband (πόρπαξ) at the centre, while the hand grasped a loop attached immediately inside the rim (ἀντιλαβή). Such a shield not only offered no protection in flight; it was a deadly encumbrance and consequently apt to be thrown away, while even in combat it covered only the left side of the trunk. Thucydides' account of the consequent tendency of two opposing hoplite lines to outflank each other on the right is too familiar to need quotation.³ Apart from the phalanx the hoplite was nothing; the phalanx therefore came all together if it came at all, and we may be sure that at the date of the first vase-painting in which the hoplite shield appears it was already in being. The recent discovery of a new monument, a proto-Corinthian aryballos found at Perachora, has enabled us to raise this date to c. 680, while Late Geometric vases continue to record the old armature and method of fighting down to one little if at all above 700. By this date the *Iliad* must have been in existence; a poem so largely martial cannot possibly have been composed in an obsolete idiom and

which it somehow achieved in the *Iliad* and the consequent authority which it enjoyed as an historical and legal document.

¹ See 'The Hoplite Phalanx', *BSA*, xlii, pp. 76 ff.

² *H* 238.

³ v. 71.

first addressed to the generation which first practised the new and revolutionary method of warfare.

That tradition powerfully reinforced by metrical considerations preserved for several centuries the fiction of bronze weapons we have found to be a fact, but the case is not parallel. No difficulties were introduced into the narrative by the retention of bronze, and with one exception no other important change in the character of weapons or armour took place between the latter part of the Bronze and the end of the Geometric Age—say, between 1250 and 700. The exception is the substitution of the throwing- for the thrusting-spear, which must indeed have profoundly altered the character of real warfare and given poets the opportunity of describing new tactics, but did not necessarily introduce confusion into what was already there. The throwing-spear could be used for thrusting in an emergency and doubtless often was, and thus the tradition of the thrusting-spear and its technique was enabled to survive.

Assuming substantial unity of authorship for the *Iliad*, we must none the less allow a considerable length of time for its composition. Throughout that time the poet must have depended for its preservation primarily no doubt on his own memory, but surely on that of others as well. Some organization must have existed for the preservation, transmission, and recitation of epic, or at least of heroic poetry. The *Iliad* must have been produced in instalments; those parts especially which have a certain unity in themselves must have been recited in public, presumably by *αοιδοί* or rhapsodists, i.e. by trained and professional reciters and, presumably, at state festivals. A good example of such a unit is afforded by books *ΓΔΕ*; this portion and others like it may well have been 'published' by recitation long before the poet had completed the *Iliad*.¹ Nor can we assume that the poem was composed in the order in which we have it. Changes of plan, happy afterthoughts, and amplifications might present themselves to the poet's mind, and their incorporation in his original design might well occasion inconsistencies. If, for example, the *Patrokleia* was in existence before the *Embassy to Achilles*, it is not surprising that Achilles' speech in *II* should be inconsistent with the *Embassy*, which is certainly ignored in 60-1 and 84-6. The *Patrokleia* on this hypothesis was in some degree of circulation before the *Embassy* appeared, and professional reciters who had learned it would continue to recite and transmit it in the form in which they had first known it until the business of writing down the entire *Iliad* was undertaken.²

¹ Wilamowitz (*Die Ilias u. Homer*, p. 301) considers that *ΓΔΕ* would exceed the limits of a single recitation, which is of course true if the standard of length is to be that of an evening's entertainment in the *πύρρον* of a *βασίλεις*. For a public recitation on a day of festival it seems by no means too long, if we consider a day's programme at the City Dionysia, and the production of such units may have marked a stage on the way to the continuous recitation of the entire epic.

² The persistence of the earlier version need not surprise us. Though the illustration is not

For the *terminus ante quem* of the *Iliad* we have found a fairly well-defined point in the introduction of the hoplite phalanx. For the *terminus post quem* of the poem as a whole direct evidence is remarkably scanty; the *Odyssey*, however, is slightly more informative. It is possible to say that the relations of Greeks and Phoenicians depicted in it can hardly have existed before 750; some time would presumably pass before they were recorded in literature. The beginning of the last third of the eighth century will not be criticized as the earliest possible upper limit for the composition of the *Odyssey*. The *Iliad* (apart from *K* and other possible interpolations which will be discussed below) is generally accepted as being older, but not much older than the *Odyssey*, and this is susceptible of something approaching to proof. It is fairly safe to put the *terminus post quem* for the beginning of the composition of the *Iliad* in or approaching to its present form as not earlier than 750. The allusions in it to Cyprus which will presently be considered support this conclusion.

It is obvious that the question of single or multiple authorship cannot be settled by archaeological evidence alone; but if it is possible to establish by such evidence a virtually consistent material culture as the background of the action, we shall have one prerequisite of unity; the period of composition is or at least may be relatively short. Assuming a date some way above 700 for the completion of the *Iliad*, we may begin by examining passages alleged to be of later origin; if the allegation seems to be well founded, we must then seek to determine whether they can fairly be regarded as interpolations in a completed and to some extent established poem. To do this for the entire *Iliad* is a task far beyond the scope of this book; nor is it denied that there are in fact a good many interpolations of single lines of the sort called inorganic and of short passages which are also inorganic in the sense that they do not greatly affect the course of the narrative; but if the investigation of a few of the alleged instances proves propitious for the Unitarian view, something like a *prima facie* case for confining the composition of the poem as a whole within narrow chronological limits will have been made out.

We will first, however, return to the unit *ΓΔΕ*. If we can discover a *terminus post quem* for its composition, that will apply on the Unitarian view to the *Iliad* as a whole and on any view to such parts as we can show to be organically connected with it. Naturally, no account can be taken of the period of composition of the whole poem, though this may reasonably be estimated in years. In this quest archaeology may help us by establishing an approximate date for the resumption of intercourse with Cyprus and the Syrian coast.

The fact that in *E* and there alone in the *Iliad* Aphrodite is called *Κέρπς*¹

in pari materia, it is permissible to recall the vain efforts of Cicero to eliminate *Philiuntii* from *de Rep.* ii. 4. 8, and substitute the correct form *Philiisii*. Cf. *Cic. ad Att.* vi. 2. 3.

¹ *E* 350, 422, 458, 760, and 883.

has been discussed above (pp. 441-2). We are assured, therefore, that the poet of *IΔE* knew Cyprus to the extent of being aware that Aphrodite was an important deity in the island. The knowledge of the poet of *A* includes another item. In the course of the arming of Agamemnon he tells of the magnificent corslet given to the Greek king by a Cypriot potentate whose status is left vague, but whom any hearer would assume to be a king, probably of the whole island. This is Kinyres, who was for Tyrtæus (so to call the author of the relevant poem)¹ a type of Oriental wealth fit to be coupled with Midas and in historic times regarded as the eponym of the Kinyradai, the priests of the Paphian cult.² The name is not Greek,³ nor is the cult with which it is associated, and the fact that Homer gives him, despite his exalted position, no patronymic suggests that he regarded him as a foreigner.⁴ The poet of the *Odyssey*, though aware of the Paphian cult, ignores Kinyres, and gives the name and patronymic, both of them Greek in form, of a king who is expressly said to rule Cyprus,⁵ by implication as its sole sovereign. This situation is possible in one period and one only—that of the Mycenaean occupation in the fourteenth century. It is true that there is no supporting evidence unless we accept the identification of the island with the Alašija of the El-Amarna letters, in which the king of Alašija addresses the Pharaoh as 'brother',⁶ which implies a position of some importance. The identification is, however, probable in a very high degree, and there is nothing unreasonable in the hypothesis that the Achaeans of Cyprus, though probably divided into communities like the small kingdoms of the archaic and classic age, yet acknowledged the supremacy of an overlord. With the waning of Mycenaean influence this régime would inevitably collapse, yet some of the Greek sub-kingdoms may have survived until intercourse between Greece and Cyprus was

¹ 12. 6 B.4, 9. 6 D.

² Our information about the Kinyradai comes from late and meagre sources, of which the chief is Schol. Pind. *Pyth.* ii. 27: ἡ δὲ πόλις Ἀνδύωνος ὠδὲς ἡ Πάφου κατὰ ἑσθίαν. . . . ἡ δὲ Κινύρας πόλις ἔστιν ὅθ' οὗ ἐκ Κόνιπας Κινυράδαι τῆ θεῶν ἀνέπαυται. Cf. Tac. *Hist.* ii. 3, *Ann.* iii. 62.

³ Kinyras nowhere occurs as the name of a Greek, and the only Greek words to which it bears any resemblance are the verb *κινέωμαι* in its various forms and the adjective *κινῆρος*. The latter occurs once in Homer (*P* 5) and the verb was read by Zenodotus in *I* 612, where it hardly deserves the strictures of Aristarchus as reported by Schol. A. That the word is a late addition to epic vocabulary is probable, and what we should expect if, as is thought, it is derived from the word which appears in Hebrew as *kinor* and in the Septuagint as *κινῆρα* applied to the harp of David (1 Kings xvi. 23). Rustathius is possibly not so far out when on *A* 20 he remarks that the name Kinyres comes from the same word. There is no reason to regard Kinyres as a Semite, but certain features of the Paphian cult, notably the prominence of the dove and, in common with other Cypriot cults, of the harp carried by so many votive figurines, are characteristic of the cult of the closely allied goddess in Phoenicia and Syria. From this instrument the priest of the Paphian cult may have derived his official title, though himself in all probability a Cypriot.

⁴ The kings of Thesprotia and the Sidonians are styled kings and heroes, but their fathers are not named. See § 316-17 with τ 387 and § 617-18 (= ο 117-18).

⁵ *P* 442-3.

⁶ Knudtzon, *Die El-Amarna Tafeln*, nos. 33-40. See Sir George Hill, *History of Cyprus*, i, pp. 26 ff., for a summary of the discussion and a bibliography.

resumed; in the seventh century there was a Greek king in Paphos.¹ The poet of the *Odyssey* may well have known of more than one such kingdom and been moved by his knowledge to bring in a fragment of Bronze Age tradition. We return to *E* confirmed in our belief that *Kúmpis* means Our Lady of Cyprus. Her name is not the only Cypriot feature of the book. The familiar verb *ἐρξαι* occurs frequently in both *Iliad* and *Odyssey* without any indication that it once possessed an initial digamma; only in *E* 650 does the combination *εὖ ἐρξάντα* betray by hiatus the original form. This is found in a Cypriot inscription of the classic age which consists, as it happens, of two hexameter lines.² Again, we are familiar with the Homeric verb *ἔχραε* in various forms, the aorist, as is generally supposed, of a present *χραύω*. This form occurs nowhere in Homer, save as a first aorist subjunctive in *E* 138; it is found, however, with a different but cognate meaning ('adjoin') in another Cypriot inscription, that on the famous bronze from Idalion.³ These two forms are not therefore part of the Homeric heritage from the Achaian dialect; they suggest *viva voce* contact with contemporary Cypriots or at least with someone who could imitate their speech. As suggested above (p. 442, n. 1), it is possible that the abnormal accent of *Kúmpis* is the Aeolic recessive accent; but in view of the close affinities of Aeolic with the South Achaian dialects the possibility that the Cypriot accentuation was also recessive and that *Kúmpis* is an example of it must not be overlooked. This is of course mere speculation, but the solid fact of relations between Ionia and Cyprus in the days of Homer remains. Is it possible to establish for these our *terminus post quem*? Aegaeon imports of Geometric date into Cyprus are exceedingly few and, as it happens, none of them is Ionian. An Argive vase of fairly early appearance found by the Swedes and other examples, under a dozen,

¹ Of the ten kings named on three Assyrian cylinders, two fragmentary, one whole, dating to the reigns of Esarhaddon and his successor Assur-bani-pal, one is accepted without dispute as Greek—It-u-u-an-da-ar of Pa-ap-pa, Eteandros of Paphos (Oberhummer, *Cyprum*, i, pp. 11, 12). Confirmation is afforded by a massive pair of gold bracelets found at Curium which bear in the Paphian variety of the Cypriot script a duplicate inscription, *Ετεανδρος το Πυθαγοράδος*. (Collitz-Bechtel, *Sammlung der gr. Dialektinschriften*, no. 46.) The bracelets may be later than 626, the year of Assur-bani-pal's death; this Eteandros may therefore be later than the king of the cylinders, in which case we have to do with a Greek dynasty.

² Hoffmann, *Die griechischen Dialekte*, i, p. 79, no. 146; Bowra, *JHS*, liv (1934), p. 63. It is true that the line occurs in the Tlepolemus episode, which lies under serious suspicion of being a Rhodian interpolation. Since relations between Rhodes, Cyprus, and the exploring Ionians must have been fairly close in the eighth century, it is possible that the episode was incorporated then, possibly by arrangement; it may even be original.

³ Bowra, p. 61. Hoffmann and Bechtel ignore the apparent connexion, and must therefore be presumed to reject it; it is, however, accepted by Boisacq. Though the evidence of lexicographers and scholiasts is obviously much less valuable than that of inscriptions, it is worth noting that two exceedingly rare words alleged to be Cypriot occur in *Z* and may be quoted in support of that book's connexion with *E* and consequently with *I* and *A*. They are first, *ἀποέραι* (*Z* 348), an aorist form which recurs only in the fight with the River (*Φ* 283 and 329); Scholl. AT on the second passage state that it is Cypriot; and secondly, *ἀεορῆσαι* (*Z* 306), a verb corresponding to the noun *ἀεορῆ*, explained by Hesychius as *καθῆ παρὰ Κύνπρω*. The verb recurs only in *O* 263, where the simile is repeated. The case of *ἰχθῆρ*, a word also peculiar

of Attic Geometric, have been noted above (p. 73, n. 4); of the latter the earliest in appearance, a funerary vase, is probably rather below than above 750 in date. There is little here on which to found an argument; throughout the history of Cyprus after the Bronze Age the importation of Greek pottery of any kind is rare. The presence of any is a guarantee of a trade which must have been of considerable volume, for Cyprus must have been the main source of bronze for the Greeks. With what they paid for it is a matter on which we can only conjecture; certainly not with Geometric pottery. None the less the presence of an Attic vase which cannot well be later nor, probably, much earlier than the third quarter of the eighth century gives us a *terminus post quem* of a sort. Help comes from another quarter. However adventurous the Athenian fleet in the second half of the eighth century (and contemporary vase-painting suggests that it was active and violent), Ionian seafaring can hardly have lagged behind, and it is significant that the name under which the Greeks became known to the Assyrians is Jaman or Javan, undoubtedly their rendering of the Ionian name. The first recorded use of it falls in the reign of Sargon II,¹ which extended from 722 to 705, a little late for our desires; but the *sainéant* kings who preceded him did not come in contact with the Greeks and consequently had no occasion to mention them. Assyrian silence therefore affords no presumption that the Greeks were not visiting Cyprus in their day.

In the last quarter of the eighth century (to judge by the pottery found) there is the foundation of a Greek depot or port-town at the mouth of the Orontes, the western terminus of the most advantageous route for direct trade with Mesopotamia.² Its identification with Poseideion is convincing, and as the form of the name is Ionic, it is safe to conclude that here the Ionians founded a mercantile settlement not much later than 725. There must have been a considerable volume of trade before such a venture was undertaken; probably much of the Ionian commerce with Cyprus was conducted in this port.

We may return to the Bronze Age tradition of Cyprus ruled by a Greek king, preserved, as it seems, in the *Odyssey*. The memory of one of the greatest of Mycenae's overseas settlements is unlikely to have perished wholly, especially as it does not appear that direct relations between Cyprus and Crete were ever completely severed. The name if little else survived in the poetic tradition, and when it reappeared in the vocabulary

to *E*, is obscure. The once popular theory of its Hittite origin is abandoned, and it is thought that it may be a (presumably earlier) form of *ēap*, **ēap*, used by the Alexandrian poets for 'blood' and said by various ancient authorities to be Cypriot. However this may be, it is probable that *ἔχρῶς* means simply 'blood' and that the lines 340-2 are an interpolation designed to reconcile 416 with 339. In 870 Ares bleeds unremarked.

¹ It is applied to a Greek who became king of Ashdod. E. Meyer (*G.A.A.* iii², p. 42, n. 3) regards him as a Cypriot, but there is no warrant for this.

² *JHS.* lviii (1938), pp. 1 ff., and cf. the Assyrian record of a Greek, all but certainly an Ionian fleet, supporting the Cilician rising in 698 B.C. (*Ibid.* xxx (1910), pp. 327 ff.).

of practical life as that of an island inhabited by people recognizably Greek and ready to do business, poets and merchants would alike be interested. We have noted the promptitude with which Homer clears up the question of Cypriot neutrality during the Trojan War. In an age of adventure and expansion, none is quicker than the poet to seize on and apply to his own ends whatever material a widening horizon reveals to his view. This, in Greece at least, is in part a matter of business. τὴν γὰρ ἀοιδὴν μᾶλλον ἐπικλείουσ' ἄνθρωποι | ἣτις ἀκούοντες αἰ νεωτάτῃ ἀμφεπέληται (α 351-2), says Telemachus; people like their poetry to be up to date. Shakespeare was of the same mind, as a glance at the setting of the *Tempest* and its history will show.¹ In 1609 the ship of Sir George Somers of the Virginia fleet, overtaken by a storm, ran aground or, more strictly, got wedged between two rocks off one of the Bermudas. The ship's company got safe ashore; not a soul perished. They spent perforce some months on the island, which possessed many advantages, including all the necessities of life, but was haunted by devils; ultimately they left it in two ships of their own building and made their way to Virginia, whence on 15 July 1610 one of their number sailed to carry a report to England. To him William Strachey, a member of the crew who had something of a literary turn, handed a document which he called a *True Reportory* in which he gave a description of the island and their experiences on it; it was addressed to an 'excellent lady' in England whose name has unfortunately not been preserved. Not long after Strachey followed his report in person; neither he nor it can have reached England till late in the year. The description in the *Tempest* of the shipwreck and of the island tallies in so many details with Strachey's narrative that in the opinion of Shakespearian scholars Shakespeare must have read the *True Reportory* in its original manuscript form—it was printed not long after—and many think that he talked with Strachey as well. The first performance of the *Tempest* was given on 1 November 1611.

In comparison with these spectacular adventures the experiences of Ionian mariners operating in the eastern Mediterranean might seem to us, if we knew anything about them, rather tame; but the tales of returned merchant adventurers would be as eagerly received and as rapidly circulated as the *True Reportory* and can hardly have been missed by Homer—so to call for convenience the poet of the *Iliad*. Working within the limits of the heroic tradition he could not utilize them after the manner of Shakespeare, but neither could he miss entirely the opportunity for gay allusion. There is of course nothing Cypriot in his presentment of the Aphrodite episode; everyone must accept the demonstration of Wilamowitz that it is essentially Ionic. Ares has nothing to do with Cyprus, and in this book his association with Aphrodite is limited to lending her his chariot; he does not even drive it for her. As a Thracian war god occupy-

¹ See Luce's Appendix to his edition of the *Tempest* in the Arden Shakespeare.

ing the hinterland of the north coast of the Aegaeon, he was a natural object of Ionian dislike and is consequently ranged among the supporters of Troy and regarded as a suitable object for burlesque. In one sense the case against Aphrodite is less clear, prime cause of the Trojan War though she be; in this aspect she has just made an impressive appearance in Troy, a thing which Ares never does anywhere. This is perhaps why Homer is so careful to mark her foreign origin so far as *E* is concerned by the name of *Kύπρις*, in order to justify so startling an innovation as the wounding of a deity by a mortal. Incidentally, it is not correct to say, as is sometimes done, that Diomedes attacks Apollo in defiance of Athene's instructions (*E* 432 ff.); his attack is on Aineias, and though he knows him to be under the god's protection, this is a very different matter. The limits of the episode are carefully defined by the epithet *Kύπρις*, used for the last time by Ares, wounded and complaining to Zeus in the closing scene of *E*. Before leaving the divine interlude, we may note that Diomedes's capture of the horses of Aineias is referred to not only in *Θ* 108, which has no significance, but in the account of the chariot-race in *Ψ* (291-2), a passage which bears no marks of being post-Homeric.

The narrative continues without a break in *Z*, the normal heroic level with which *E* opened being at once resumed. There is only one discrepancy, but it appears at first sight to be serious. Why does Diomedes in his colloquy with Glaucos say that he would rather not fight with a god (*Z* 128-9)? There are various answers, the first being that of the Separatists that *E* or, alternatively, the Diomedes and Glaucos episode is a later interpolation. Of the two alternatives the latter is preferable, but is it necessary? Is it even probable? Of course interpolation, like other crimes, will out as a general rule, because the criminal has forgotten to remove some important clue; but the degree of his negligence here is hardly within the limits of credibility. The immortal blood of Ares can hardly have dried on Diomedes's spear (*E* 855 ff. and 870); not 170 lines have passed since he dealt him that wound. There is no difficulty in regarding Diomedes's disclaimer as deliberate, intended to mark his return to the normal standard of heroic behaviour. He does not say that he has never fought with gods; like the audience he knows that he has just attacked two under the direct instructions of Athene and without evil consequences—so far. Now circumstances have changed. *οἰώθη φίλοντις αἰνῇ*; Athene is not there, and the stranger may be Apollo in disguise, come to take his revenge. The episode terminates appropriately with a light-hearted flourish, leaving Diomedes with a net profit equivalent to ninety-one oxen.

We may now address ourselves to *Z*. It is claimed by the Separatists as one of the latest additions to the original *Menis* and is universally acknowledged to exhibit all the highest qualities of Homeric poetry. Virtually without battle-scenes, it is for that reason exceptionally free from traditional elements; that is to say, Homer has no reason to be

anything but himself. We have found it to be a natural and logical continuation of *ΓΔΕ*, and there appear to be no grounds for regarding it as the work of a later poet. The portrait of Helen in *Γ* is developed, surely by the same master hand, in *Ζ* and thrown into relief by that of her foil Andromache, who presently succeeds her on the stage; the poet may already have had in contemplation that final scene in which for the first and last time in the poem the two women meet face to face, in wordless confrontation by Hector's bier. Their appearance in this book is brought about by Hector's mission to Troy to arrange the *Supplicatio*. It has been argued above (pp. 442-3) that though the *Supplicatio* in its actual form is almost wholly the work of the interpolator, there remains one trace of an older version in Hector's own account of his mission before he quits the field (113-15). In this the ritual foreshadowed is entirely in accord with Homeric practice. The counter-argument, Would the interpolator have left such evidence against himself? must of course be faced, and it is possible in this case to say that he had a reason for doing so. One repetition of the lengthy ritual prescribed is enough; to have it three times would be intolerable. The interpolator might argue that Hector's expressions are general enough to escape the charge of contradiction.

The episode of Diomedes and Glaucos, or rather the tales which the latter tells of Lycurgus and Bellerophontes, are also frequently taken to be late, though apparently for no more positive reason than that these heroes make no other appearance in Homer, that Dionysus is not a member of the Homeric pantheon, and that his only other appearances are in the Catalogue of Heroines in the *Nekyia* and in *ω* of the *Odyssey*, both undoubted later additions, and in the Catalogue of the Loves of Zeus in *Σ* of the *Iliad*, which may be another. Unlike the *Supplicatio*, the episode of Diomedes and Glaucos shows no signs of being an interpolation or of having superseded an earlier version; it is an essential structural member of the book. Time is continuous and the epic convention does not permit of breaks in it;¹ it is measured only by what happens in it, and therefore in epic something must happen all the time. How is the action to be carried on after the *aristeia* of Diomedes, which is the occasion of Hector's mission to Troy, until the hero may be supposed to have arrived at his destination? Not by another *aristeia*, to dim the lustre of Diomedes'; still less by a stretch of such comparatively undistinguished fighting as leads by attrition to the climax of *Ο* and so to the intervention of Patroklos. Olympus is out of the question, as we have just had an Olympian interlude in *Ε*. Yet the action must be confined to the plain until the passage of time permits the poet to transfer it to Troy. The problem is solved by the masterly introduction of an episode which keeps the hero of the preceding book on the stage, yet carries us so far away in time and

¹ See Zielinski, 'Die Behandlung gleichzeitiger Ereignisse im antiken Epos', *Philologus*, Supplementband viii (1901).

space that we return to the main narrative with the feeling that a long period has elapsed. The device has already appeared in the *Teichoskopia*, which among other functions fills the time occupied by the journey of the Trojan heralds back to Troy. The convention does not extend to the return journey; that is in both cases—that of Priam in *Γ*, of Hector and Paris in *Ζ*—permissibly telescoped, for the necessary interval in the original action has been filled and defined. In another case we find the distance of Troy from the Greek camp measured in the same way. When Priam goes to ransom Hector's body¹ his outward journey is made eventful by the encounter with Hermes, but the return is disposed of in a few lines; on the outward journey suspense was heightened by protraction, but once it is allayed, nothing secondary can be allowed to defer the homecoming of the dead hero. The *Teichoskopia* takes up 124 lines, the Glaukos and Diomedē episode 118, the journey of Priam in *Ω*, measured strictly from gate to gate, 118; its limits are, however, less strictly defined, for it is not a digression from, but a part of, the main narrative. Even with a little latitude, however, it looks as if the poet had in his mind some standard of the length of episode necessary to create the illusion of the passage of a period of time which in his own mind was fairly well defined.

It has often been remarked that both the tales of Glaukos are epitomes of what must have been told at greater length elsewhere. Similarity of theme and the tell-tale *καί* in l. 200 show that they must come from one and the same poem, one in which the tales were told of great men favoured by heaven who sinned by *ἑβρις* and ended in disaster. This is not epic; it belongs to the *ἦ οἶη* type of poem, but that does not prove it to be late. It is unthinkable that in the age which produced and preserved the *Iliad* there was no subsidiary literature. The leading forms of lyric must have been established, and, more to our purpose, Hesiod and the Cataloguers as well as Homer must have had their literary ancestors, poets whom Homer might well honour with a reference. It has been argued that the acquaintance of the Greeks with Dionysus began in Phrygia, and it is certain that contact with their Anatolian neighbours must have rapidly provided the Ionians with new subjects; the *Odyssey*, as we shall see, is a case in point. For the Dionysus story of *Ζ*, however, there is no need to seek an Anatolian origin. That he is not originally a Greek deity is admitted on all hands; for Homer he is not an Olympian, i.e. he is not a member of the pantheon of heroic tradition, but this is not in itself a reason for regarding his arrival as post-Homeric. It is true that the date of the introduction of his cult into Greece cannot be certainly fixed, but the grounds for placing it before that of the Ionian migration, though not conclusive, are strong. To those generally given² may be added the consideration that the present passage associates him through Lycurgus with Thrace and the only other mention of him in the *Iliad* (*Σ* 325) through

¹ *Ω* 322 ff.

² See Farnell, *Cults of the Greek States*, v, pp. 109 ff.

Semele with Thebes, whereas nowhere in either poem is there any hint of a connexion with Phrygia, where the god must certainly have arrived before the date of the Ionian settlement. The Phrygian invasion must have been a main, perhaps the principal factor in the collapse of the Hittite empire, and the Phrygians, succeeding to the central part of their domains, must have established there the cult of the god they had brought with them. Here the Ionians must have encountered him on their arrival, for with the Phrygians of the west region (Nakoleia) they must have come into immediate contact. Conceivably it was in that period of Thracian activity and expansion which found its chief vent in the invasion of Anatolia that the cult first made its way to Greece, presumably, since Thessaly was by-passed, by sea to Boeotia and perhaps to Attica. However that may be, if it reached those regions by a date above 900, it would, so far as our present evidence goes, have anticipated the Ionian migration or at least a considerable part of it. It is a remarkable fact that Homer ignores—he can hardly have been ignorant of!—the connexion of Dionysus with wine, though his description as *χάρμα βοροῖσιν* (Σ 325) is a covert allusion to it. Hesiod mentions it frankly in the *Works* (614), but in the more elevated *Theogony* merely distinguishes the god by an epithet, *πολυγυθέα* (941), in the manner of Homer, and in 947 by the new and somewhat unexpected *χρυσόκομης*. The whole passage (940-4 and 947-55) was athetized in antiquity and is doubtless an addition, in which, however, the tradition is on the whole maintained. Here he gives the version of the Ariadne episode which afterwards became canonical,¹ but does not allude to Naxos; apparently he chose in this *genre* to work within epic limits. Archilochus, as we might expect, mentions Dionysus as the wine-god and betrays the Phrygian connexion by associating him with the dithyramb,² though Stesichorus is the earliest extant authority to call this form of poetry Phrygian.³

The explanation of these curious circumstances must lie in the fact that wine had been known to the Greeks everywhere long before the arrival of Dionysus; it was used in the worship of all deities, severally and collectively, and its patronage could hardly in the record of the heroic age be transferred to the somewhat disreputable new-comer.⁴ The struggling farmer and the adventurer of dubious antecedents used the language of everyday life around them.

¹ The whole Catalogue of Heroines in the *Nekyia* is a later addition to the *Odyssey*, but the passage in which Ariadne is denounced by Dionysus and slain on the islet of Dia north of Candia appears to be an interpolation within an interpolation and of Athenian origin. The mention of Theseus is suspicious, and so is the spelling *Διώνωος*, unique in Homer and not found in Hesiod or Archilochus. In 74, where Dionysus is said to have provided a golden amphora in which to bury the ashes of Achilles and Patroklos, an allusion to the chthonic aspect of the god may be intended.

² 77 B.⁴, 77 D.

³ 37 B.⁴, 74 D.

⁴ So far as wine is associated with any single deity in Homer, the honour is Apollo's, but the wine in question is that of the Maresia district and was presented to Odysseus by Maron, its eponymous hero, who was also priest of Apollo (ι 163 ff., 196 ff.); elsewhere other deities may have claimed the distinction. The *Iliad* knows Thrace as a wine-producing region (171-2).

The tale of Bellerophon differs from that of Dionysus in that it is sharply localized. This is established by Malten in his masterly study *Bellerophon*,¹ in which he shows that both the hero and the Chimaira are at home in Lykia (according to the earlier authorities in west Lykia), where their origin must be sought, and in Caria; further, that the winged horse, ignored by Homer, but an indispensable assistant in the slaying of the monster, is a creation of the Near East with a wide diffusion, which, however, does not extend to Greece. Consequently the connexion of horse and hero with Corinth is secondary and superficial. In Malten's view it originated in the desire of the Lykian kings to be provided with a Greek ancestry; hence, as he holds, the Hellenizing termination *-phontes* of the non-Greek name. The origin of the Chimaira can no longer be sought in composite or misapprehended forms on Mycenaean gems;² the shape which she wears in her native land is that which has been fixed and preserved for us, not indeed by Homer, but by Hesiod³ and by the artists of the seventh and later centuries. In the *Iliad*, in a pair of lines which lie under no suspicion of lateness (*II* 328-9), she is said to have been reared by a man with a name of Carian type, Amisodaros, father of two of the followers of Sarpedon. Pegasos, whose name is of an Anatolian type specially frequent in the place-names of Lykia and Caria, carries, as Hesiod tells us,⁴ thunder and lightning for Zeus and is in fact an embodiment of the lightning. Bellerophon himself, it would seem, is an anthropomorphic incarnation of the same force, but his highly localized godhead suffers defeat at the hands of a less provincial potentate armed with the same weapon. In Homer that Zeus could only be the Zeus of the Greek Olympus, but we may reasonably suspect that in earlier days he was the Carian deity subsequently attached to the Greek pantheon as Zeus Labrandeus,⁵ whose double axe marks him as the master of thunder and whose sanctuary was in the neighbourhood of the Carian town of Mylasa. We now know this town to have been the seat of an LH III settlement; there is, as Malten points out, no reason why the Lykian myth should not have been known to the Greeks of the Mycenaean age who colonized Rhodes and whose conflicts with Lykia are reflected, it may be, in the encounter of Tlepolemos and Sarpedon in the *Iliad*,⁶ but that this knowledge was carried to mainland Greece in the Bronze Age and there preserved in memory is in the

¹ *Jh.* xl (1925), pp. 221 ff.

² The interpretation of the design on a glass plaque from Dendra as the encounter of Bellerophon and the Chimaira (Persson, *RT.*, p. 65) cannot be upheld. The plaque is in poor preservation; it may be that an authoritative interpretation is impossible. Judged by the reproduction, A. Roës's rendering of the design (*JHS.* liv (1934), p. 25) as the stock Mycenaean subject of a lion seizing a goat is convincing. The name of the monster cannot be the Greek word denoting a young she-goat; it must be a foreign word whose assimilation to the Greek contributed a feature to the form evolved by poet and artist.

³ *Th.* 319 ff.

⁴ *Th.* 286.

⁵ See *BSA.* xxxvii, pp. 178-9.

⁶ The episode is probably an interpolation and may well be due to the agency which introduced the Rhodian entry into the *Catalogue*.

highest degree improbable; once we give up the Corinthian ancestry of Bellerophontes there is not a single circumstance in favour of the hypothesis. On the other hand, the Ionian settlers would meet the tale as soon as they established themselves in their new homes, at any rate in the south, where their contact with the Carians was immediate and many elements of Anatolian culture were admittedly absorbed. A date not earlier (but also not later) than the eighth century seems appropriate for the Homeric narrative, in which the primitive material has been carefully adjusted to its epic surroundings. Malten thinks that it is due to the rationalizing temper of the Ionian bard that the classical form of the Chimaira as we know it from Hesiod and the proto-Corinthian vase-painters has been modified, though, as she has hardly gained in credibility, it is difficult to see the point of the alteration. The elimination of Pegasos and his wings from this motive is more credible;¹ the conjecture may, however, be permitted that he is glanced at in the obscure phrase *θεῶν τεράεσσι μῦθος* which, if it does not denote the beast himself (for which meaning the singular would be more appropriate), may refer to the vision of Bellerophontes and the gift of the bit. There is doubtless truth in Malten's view, but there is another reason quite as strong as the impropriety of his wings for the exclusion of Pegasos. Homer could not be explicit about him, for he could not admit that riding had been practised in the heroic age; even Hesiod is non-committal in his language. Needless to say, the Ionians must have encountered the practice as soon as they settled in Anatolia; even in mainland Greece it is portrayed on Late Geometric vases. The poet did not lack knowledge, but did not choose to violate epic convention.

Writing, however, could be admitted without doing violence to the epic vocabulary, *γράφειν* being familiar in the sense of 'scratch'. Practised, as we have seen, at Athens, and that not in its earliest form, *c.* 725, it appears to have been at first in very restricted use; the first evidence of its employment for trivial ends dates to *c.* 700. The air of magic and mystery with which the poet invests it is still in the eighth century appropriate, whereas in the seventh it would have been absurd. One element, indeed, though essential to the plausibility of the story, is lacking: the tablet, though folded, is not sealed. The seal-stone which figures so prominently in Minoan and Mycenaean art vanishes with the rest of the Mycenaean culture to reappear only in the Geometric age,² presumably as a concomitant of the alphabet. With the object the name must have been

¹ For the resistance which Greek art for some time maintained to the intrusion of the Oriental winged monster see Poulsen, *Der Orient und die frühgriechische Kunst*, pp. 110, 114, 179. Homer twice admits a winged Iris (*Θ* 398, *A* 185). In each case she is dispatched from the Anatolian Ida, and in the second, if the plural *χεῖρες* is to be taken literally, Zeus has a thunderbolt in each hand, an Oriental trait.

² For a group of Geometric seal-stones see S. Casson, *The Antiquaries Journal*, vii (1927), pp. 38 ff., and for one from Siphnos p. 179 and Pl. VI, 3. The poet of the *Odyssey* also ignores the seal.

lost, and although the seal must have been there in the full version of the story on which Homer drew, he could not admit to epic the alien neologism *σφαιρίς*. Nor is any word for letter, writing, or book to be found in epic; except in the case of Proitos and Bellerophontes, Homer takes the illiteracy of his heroes for granted. Though the ancients differed on the subject, it is clear that when Aias marks his lot he does not write his name, but scratches some arbitrary sign (*ἐπιγράφας*);¹ similarly in the Bellerophontes story *γράφειν* means merely 'to scratch'. For Homer and his contemporaries the verb and all its compounds probably still bore this meaning in ordinary life; in any case it is established in the other passages in which the word occurs in epic,² and the hearer of the tale of Bellerophontes would experience no such shock as the attribution to a hero of riding or trumpet-blowing would have caused.

The language of the Glaukos episode as a whole conforms fairly strictly to the epic standard. *τιφλός*, indeed, which occurs in the Lycurgus story, is a *ἄπαξ λεγόμενον* for *ἀλαός*;³ presumably Homer is quoting verbally from his source. There is an example of the neglect of digamma; the line in which it occurs (151) could and perhaps should be dispensed with, but the lapse does no more than show that the line does not go back to the earlier stages of heroic poetry.⁴ The number of lines and half-lines in Z which are to be found elsewhere in the *Iliad* and *Odyssey* is no greater than in most parts of the poem and less than in some, and they consist entirely of such formulae and phrases as we should expect to find repeated in epic.

There seems therefore to be no reason why, once the Athenian version of the *Supplicatio* has been removed, Z should not be accepted as Homeric in the unitarian sense and as dating somewhere in the third quarter of the eighth century. H as a whole does not call for comment; the building of the Greek wall, however, is an interpolation which it will presently be necessary to examine. Of the difficulties presented by Θ no better account

¹ H 175 ff., and cf. the scholia on 185 and 187 and on Z 169; see also Lehrs, *De Aristarchi Studiis Homericis*, pp. 95 and 328. In spite of the stories of Kadmos and Palamedes, there was evidently reluctance to admit the existence of ordinary Greek writing as early as the Trojan War. Presumably the memory of the introduction of the alphabet from Phoenicia just on the threshold of the historic age survived for some considerable time. Cf. Josephus (a not entirely disinterested disputant), *c. Apionem*, i. 10-12.

² The verb, generally compounded with *ἐν* and with the sense of 'to give a grazing wound', occurs seven times in Homer, the adverb *ἐνγυῖσθον* once, and the noun *γυῖστος* once, but in the spurious *ω*. It is doubtless the fact that it occurs in Homer that led Ap. Rhodius to use the noun (iv. 579) in the sense of *γυμνασία*, which it is unlikely that it ever possessed. The writings to which he refers he certainly conceived as hieroglyphic, since they were in Aia, a supposed foundation of Sesostris. The *σφαιρά* of Proitos are explained as hieroglyphs by Schol. T, as *εἰδωλά* by Schol. A, who probably means the same thing. Cf. the story of Agesilaos and the alleged hieroglyphic writings found in the tomb of Alkmenes (Plut. *Mor.* 577 E).

³ According to Hesychius and the *Γlossae* *σφαιρίς* *ἄλαος*, *ἀλαός* was the Cypriot word for 'blind'; i.e. in epic vocabulary it was part of the south Achaean legacy from the Bronze Age.

⁴ The completet recurs as Y 213-14, but as the whole Alcinous episode is an interpolation, this merely suggests that it was establishing itself as a new formula. Chantraine (p. 141) gives for the various parts of the perfect 125 examples of the observance of the digamma and approximately a dozen (one or two being doubtful) of its neglect.

could be given than Leaf's in his introduction to the book, where its literary merits and the propriety with which it fulfils its rôle in the narrative are also recognized. Discussion of it will be simplified if it is for the moment postponed while we investigate the cause of other truncated or interrupted narratives in the *Iliad*. That these apparent lacunae are in fact due to the working of a subtle convention governing the narration of contemporaneous events in epic is the thesis expounded by Zielinski in the monograph cited above (p. 470, n. 1) and supported by an analysis of the main relevant passages so close as to leave little room for doubt.¹ The application of this law to the major apparent flaws in construction on which the Separatists' case against the *Iliad* is largely built brings order out of what appears to be chaos and renders it unnecessary to have recourse to the Separatists' solution of various and sometimes conflicting versions of epic events patched together by later hands.

We ourselves are aware of no awkwardness in presenting in narrative two or more series of contemporaneous events, perhaps because the great novelists of the nineteenth century, deploying their armies of dramatis personae on an extensive field, made no bones about it. Their method was of course simply to follow the fortunes of series A for a time and then desert it for series B, taking up the tale at the point in time at which series A had started. Often of course no more was necessary than a single sentence to say that in point of fact nothing had happened till the event which the author was now about to relate; but if there was a parallel series of events, then they had to be told serially until the point in time was reached at which the narrative of A had been abandoned. This of course is—or was until the technique of the cinema was introduced into literature—the only method of getting everything on to the record with an intelligible time-scheme; it is necessarily the method of the historian, in whose wake the novelist, if he ever thought about it, may be presumed to have followed.² If it is to be successful, the author must warn the reader explicitly on every occasion on which he puts the clock back, after which he can proceed confidently; for in all the prose story-telling of

¹ Zielinski was not the only, nor indeed the first, scholar to call attention to the peculiar method followed by Homer in narrating contemporaneous events. In his introduction to *Σ* Leaf cites G. W. Nitzsch, unfortunately without any precise reference, as using it to explain a well-known difficulty in the sequence of events in *N* and *Σ*, and Monro in his edition of *Odyssey* xlii-xxiv says (p. 311): 'The epic narrative is a single continuous one. The poet could shift the scene of his story back to the halls of Zeus, but not to a point of time in the irrevocable past', using this statement, which he does not claim as a discovery, to account for the double divine assembly in *a* and *ε*. Possibly Monro had been brought up on Nitzsch's doctrine; Zielinski, a considerably younger man, does not seem to have heard of it. Monro's *Odyssey* and Zielinski's monograph came out in the same year (1901); evidently neither knew of the other's view on this subject. For Monro's see further *op. cit.*, p. 316.

² On the whole, however, the great masters seem instinctively to have avoided as far as possible these breaks and reversals in time and to have arranged their events serially. In that eminently Homeric work *Jeanne*, with its multitudinous characters and many scenes of action, returns to the past are surprisingly few.

which we have any knowledge, the printed and numbered page makes it easy for the reader to turn back and verify the point in time at which action is resumed in a temporarily discarded series. Homer, though he also worked in a large field and with a large number of characters, had no such means of keeping his audience chronologically posted and, far from striving to put everything on record, must have desired to select and simplify. Whether the method he follows was his own creation or an inheritance from the past, it is rigidly adhered to in the *Iliad*: he allows no turning back in time to pick up a thread once dropped. The simplest form of his procedure is to be found in the case of a series which begins with an event and then passes into a uniform process (*gleichmässiger Vorgang* in Zielinski) to which there is no need to revert until it impinges on the series which the poet has meanwhile been pursuing or the parallel; series may be merely an episode without relevance to the main theme, designed, it would seem, primarily to mark the length of time which the *gleichmässiger Vorgang* is supposed to occupy. We have just noted an example of the first in the *Teichoskopia*, which is not a narrative of events and whose contents fall quite outside the time-scheme, and of the second in the encounter of Glaukos and Diomedes, where the tales told have no connexion with the theme of the *Iliad*. If, however, two or more series of genuine events have to be dealt with, then, since all turning back is absolutely banned, a lacuna must occur in one or both, or, if there are more than two, some may be broken off short and left in the air. The *Teichomachia* of *M* affords an admirable example of the technique.¹ Disregarding for the moment the undoubted interpolation contained in the first thirty-five lines of the book, we come next to fifty-odd lines containing the narrative of a single series of events, viz. the holding up by the Greek trench and wall of the chariot assault launched by the Trojans and the advice given to Hector by Poulydamas. This is followed at l. 88 by the fivefold attack which he recommends; of two out of the five, viz. those led by Paris and Aineias, we hear no more. The poet proceeds at once with that led by Asios, which is peculiar in that he does not abandon his chariot before the trench but attempts to force the gate, an adventure which the poet follows down to l. 174. His complaint in l. 176 (*ἄργαλέον δέ με ταῦτα θεὸν ὥς πάντ' ἀγορεύειν*) suggests, as Zielinski says, that he feels the complexity of his task almost too much for him; possibly it conveys a hint that he is essaying things unattempted yet in heroic poetry. Asios first reappears in *N* 384, chariot and all, inside the Greek camp, and we never hear how his encounter with the Lapiths at the gate terminated; the incident has fallen an inevitable sacrifice to the convention governing contemporaneity. For the hero's own end the poet did prepare us (*M* 113 ff.), perhaps to warn his hearers to be on the watch for a reappearance.

¹ Zielinski, op. cit., p. 430.

Hector himself disappears from *M* 265 to 437, during which time we must assume that he continued his unsuccessful attempts on the wall, which is something in the nature of a *gleichmässiger Vorgang*, and now Sarpedon and Glaukos emerge with no hint of what they have been doing in the interval.

This application of Zielinski's theory, which, it must be repeated, is confirmed by the poet's practice throughout the *Iliad*, clears *M* of the principal faults which have been attributed to it. The wall was there because it was part of the tradition familiar to the poet and his audience from other poems which recorded other incidents in the Tale of Troy;¹ only when these were forgotten did it become necessary to account for the presence of something not previously mentioned in the *Iliad*. Hence it was introduced at a somewhat awkward juncture in *H*, and since every trace of it had naturally vanished from the landscape of the Troad, was prospectively disposed of by the divine intervention prophesied at the beginning of *M*. Exception can be legitimately taken to many features of its creation in *H*, as can be read in Leaf's introduction and notes, but these blemishes are as nothing compared with those which at the first glance condemn the opening of *M*. The prophecy of future events outside the action of the poem contravenes Homeric practice; the catalogue of the rivers of the Troad, five of them otherwise unknown to the *Iliad*, points to the Hesiodic school, or rather perhaps to its influence,² while the reference to the heroes as *ἡμιθεοὶ* betrays a new way of thinking alien to the *Iliad*. If this interpolation is removed, nothing remains to which objection can be raised;³ the method of the narrative, however foreign to our ideas, would not perplex an audience trained to understand it.

Sometimes both series of events may be too important to admit of the dropping of either, and then there is only one remedy: they must be narrated as successive and the audience must be trusted to supply the right interpretation.⁴ Obviously such a method must often have resulted in obscurity; probably not even a contemporary audience always hit the mark, and it is not surprising that the device eluded generations of scholars.

¹ That such existed in the 5th century is strongly suggested by the allusion in Thucydides (i. 11) to a wall of the camp whose origin (it is implied) was not described and which plainly is not the wall of our *Iliad*. At the time of writing Thucydides is unlikely to have had the Attic text before him and, so far as the wall is concerned, may merely have used one which had not suffered the interpolations of *H* and *M*. The *γεφυρία* of the Chersonese, however, points to sources outside the *Iliad*.

² All the rivers except the Karesos occur in *Theog.* 338 ff., but there are no identical lines. As F. Jacoby suggests (*Heriadi Theogonia*, ad loc.), the passage may well be an Ionian interpolation, but there are no substantial grounds for bringing it down to the 6th century.

³ The building of the wall in *H* must of course go too, and the allusion to it made by Achilles in a taunting couplet (*I* 349-50). To those who regard this book as an addition of later date the lines present no difficulty; they are perfectly apposite. On the opposite view they can be spared without any great loss, and the appearance in 353 of an unheralded *τείχος* which only on reflection is seen to be the wall of Troy is decidedly awkward. Possibly it was this very word which, on the second hypothesis, gave the interpolator the cue for his insertion.

⁴ Zielinski, *op. cit.*, p. 432.

A short and clear example, however, makes it certain that despite its defects it was sometimes employed by the poet. In *O* 4 ff. Zeus, awaking from his slumbers on Gargaron, sends a summons to Iris and Apollo to attend him; they receive the message in 146-8, set out in 150 and, making celestial speed and encountering no incident, arrive in 151. The business on which they are summoned is urgent; Poseidon, who has been supporting the Greeks, must be told to desist and the disabled Hector must be divinely inspired with fresh might. If either message could wait on the other, what need for two messengers? True, Iris could not fulfil the function of Apollo any more than she could that of Hermes in *Ω*, but it might be thought that Apollo could discharge both tasks. This, however, would not do; obviously the divine cause of trouble must be dealt with first, and the poet wished to dwell on the conflict of wills between Zeus and Poseidon and the subjection of the latter. Hector must not be left so long in such straits; hence the second messenger. The briefing of each is a matter of minutes or rather a minute, even in all the amplitude of hexameters; the errands therefore must have begun all but simultaneously, though in the poet's narrative they are separated by some fifty lines. In a simple case like this the well-accustomed audience would not be misled; the mere introduction of the second messenger would put it on the alert. We shall have occasion to return to this method by and by; at the moment we must revert to that of dropping one series, to which *Θ* owes its title of *κόλος μάχη*. In this book the sun sets on the meeting of the Olympians (485); the poet cannot turn back to tell the fortunes of the battle on the plain. Obviously this explanation of one puzzling feature is not enough to exonerate *Θ* as a whole from the charge of being a later addition and involving *I* in the same condemnation.

Before we pass, however, to the special difficulties of *Θ*, we may consider the remaining instance in which Zielinski's theory can be used to rectify an apparent flaw in construction, this time on a large scale, and consisting in the failure, as it seems, to relate the beguiling of Zeus in *Ξ* to activities of Poseidon in *N*. Here the Separatists generally assume a conflation of two narratives, somewhat in the manner of those supposed to be combined in the *Teichomachia*, dealing the one with a walled, the other with an unwallled version of the Greek camp. That the guile practised on Zeus should naturally follow as promptly as possible on the intervention of Poseidon in *N* 43—say, after 82—and that after the preliminaries to single combat between Hector and Aias in *N* 795-857 the actual combat should at once ensue, whereas it is deferred till *Ξ* 402—these are points accepted by both parties; but the difficulties are not solved by the assumption of a conflation of two sources. This is abundantly shown by Leaf in his characteristically thorough, candid, and penetrating Introduction to *Ξ*. He cites with sympathy G. W. Nitzsch's anticipation of Zielinski in his suggestion that the beguiling of Zeus is to be regarded not as subsequent

to the events of *N* but as contemporaneous with them, but objects to it that 'so violent a retrogression to an earlier point in the story is impossible without explanation' and 'that a hearer should understand it without a word of explanation is beyond all reason'. If, however, the serial narration of contemporaneous events was a method regularly employed in epic, this objection falls to the ground.¹ It is remarkable that Nietzsche, who died in 1861, should have in this instance forestalled Zielinski, apparently unguided by any comprehensive theory of Homer's ways of dealing with contemporaneous events. The coincidence of judgement strengthens the natural impulse to believe that the only solution which brings order out of chaos must be correct. It is possible that even to Homer's audience his narrative was somewhat obscure, but to obviate this as far as possible the poet marks the point at which he resumes the thread broken off at the end of *N* by a passage (*Σ* 388-401) which in the long sea-simile provides a recognizable echo of *N* 788 ff., the first notification of the coming combat. The technique is something like that of the double divine assembly in *α* and *ε* of the *Odyssey*, where the mission of Athene has to be developed and the consequent adventures of Telemachus carried to a crucial point before Hermes can be dispatched on his errand to Kalypso.

We may now return to the question of *Θ*. If *I* is indeed the work of a later poet who desired to engraft it on the *Menis*, he might well introduce it by just such a book as *Θ*; if, on the other hand, it is the work of the Arch-poet himself, its peculiar character is harder to account for. None the less it is difficult—some may find it impossible—to ascribe the *Prosebeia* to any poet but Homer. Not only is the general poetic level high; the book is an organic part of the *Iliad* and its removal would be a mutilation. The value of the poem as a whole would be grievously lowered, and that in respect of qualities which are most truly Homeric. Not only is the tension increased, the suspense heightened: the whole situation acquires a new depth and significance as we watch a tragic hero prepare his own doom. If no overtures were made by Agamemnon; if the situation was left as it was at the end of *A* and by the obliteration of *Θ-K* the narrative led straight on through the struggles of the hard-pressed Greeks to their desperate plight at the end of *O* and so to the *Patrokleia*, it would not be possible to let fall on Achilles that weight of condemnation which the poet of the *Iliad* felt to be his due and to justify the nemesis which overtakes him. The death of Patroklos would be rather a lamentable stroke of fortune than the work of the man whom he loved and who within the limits of a haughty and vindictive nature did love him. Nothing short of the consciousness of guilt could have broken Achilles and so given us a glimpse of the nobility which in spite of all had its part in him. Apart from

¹ The ease with which the 'flash-back' of cinema technique to events prior to the opening of the story was transferred to broadcast narrative could not have been foreseen by any but experts, yet if the narrative is properly conducted, there is no obscurity whatever.

one or two short and easily removable interpolations—the transformation of Boeotian into Egyptian Thebes and the fanciful description of it as a vast military base, the allusion to temple treasures at Delphi and to the building of the wall—there is nothing in *I* which can be stigmatized as late or out of keeping with the rest of the *Iliad*. With *Θ* the case stands otherwise. It can hardly be anything but an exceedingly skilful pastiche composed for the express purpose of effecting the insertion of *I* into the *Iliad*. One of the principal grounds of criticism is the exceptionally high number of lines and half-lines in it which occur elsewhere in the *Iliad*, a valid reason for suspecting it to be patchwork. We may note in passing that sixteen of them, lifted from *E*, give a condensed version of the setting out for war of Hera and Athena, told in detail in the earlier book, and do not include the more than suspect lines which describe the arming of Athena.¹ The harnessing of the chariot is also omitted. It has been noted above (p. 327) that these lines (*E* 722–32) may also be an interpolation, though by no means necessarily late, since the eight-spoked Assyrian wheel must have been known to Cypriots some time before the end of the eighth century and to other Greeks little, if at all, later. If the absence of these passages from *Θ* means that the poet borrowed from *E* before they were inserted in it, then the date of *Θ*, whether or no it be the work of Homer, must be fairly early, very possibly rather before than after 700. This would suit other features of the book which are foreign to the *Iliad* but do not bear any obvious marks of lateness. The importance attached to the shield of Nestor and the corslet of Diomedes² is un-Homeric, but the *κατόνες* mark the shield as of the pre-hoplite type.³ Since the corslet was made by Hephaistos, it must be supposed metallic, though the poet avoids the use of any betraying adjective; but this very fact suggests that like Hera's secret key,⁴ the work of the same deity, the article was not in ordinary use and may have been known only by repute. The poet may have had in mind the scale corslet, which had even better opportunities of becoming known to the Greeks than the Assyrian chariot-wheel. Such an example of contact with the Near East we undoubtedly have in the description of Teukros' archery;⁵ it is in the Assyrian manner, with which the Cypriots must have been acquainted from at least 715 onwards. The epithet *χαλκοδομήκων*, on the other hand, occurs in a pair of lines (62–3) which may well be interpolated; it is true that apart from this epithet there is nothing wrong with them, but they can well be spared. The comparison of Hector's eyes to those of Gorgo (349) is not quite on a par with the certainly interpolated mention of the Gorgoneion in the description of Agamemnon's shield. There it is a blazon, and the Gorgoneion as a blazon is not known till the second quarter of the

¹ They are condemned by the character of her shield, which resembles Agamemnon's (pp. 190–1), and of her helmet, for which neither art nor literature affords a parallel. Whatever its remote source of inspiration, it appears to be an un-Homeric flight of fancy.

² 191 ff.

³ Cf. *N* 407 and *supra*, pp. 192–4.

⁴ *E* 168.

⁵ *Θ* 266 ff.

seventh century; the history of the head, however, goes farther back, as is shown by the discovery at Tiryns of a series of Gorgon-like masks of terracotta dating to c. 700.¹ None the less, the line is open to suspicion and can be removed; its removal, however, leaves the termination of the passage rather abrupt. The unique mention of Iapetos (479) cannot be dislodged and is not necessarily late, but gives a glimpse into a world which epic normally ignores. The observance of the rule for the treatment of contemporaneous events already noted also points to an early date for Θ , though one that lacks precision; in the absence of any evidence from the fragments of the Cycle we cannot tell when or if it lapsed.

If the application of the rule has vindicated bks. *M*, *N*, and *S* as forming a single, continuous, and carefully constructed narrative, we are justified in approaching the problem of Θ and *I* with our confidence in the substantial unity of the authorship of the *Iliad* considerably strengthened. There is no further question of evidence; all that can be done is to balance probabilities, and the scale will be tipped, in whichever direction, by personal preference. Despite the admitted and incurable discrepancy between the *Presbeia* and those lines in the *Patrokleia* which imply that Agamemnon had made no overtures to Achilles, it is hard to doubt that *I* is the work of the poet of the *Iliad*; the case of Θ , however, must be considered on its own merits. Since we are dealing not with typical interpolations the motive of which can be at least reasonably conjectured, but with an alleged insertion on a grand scale and of a unique character, attempts at explanation must be purely speculative. That the *Presbeia* is later than the *Patrokleia* must be admitted by both parties. As has already been remarked, we have no evidence that Homer any more than Virgil composed his poem in a strict chronological sequence; if the *Presbeia* was a later development of his great theme, he may have died soon after completing it and before it was definitely incorporated in the *Iliad* for which he had designed it. In that case Θ might be the work of a younger contemporary, possibly 'Homer's' successor as head of the school, who achieved the insertion of the *Presbeia* together with his own work as an introduction to it. This would account for the number of borrowed lines in Θ and for the admission of features not found elsewhere in the *Iliad*; though it might be argued on the other side that 'Homer' in his last years might be responsible for both. It is, however, decidedly in favour of the later authorship of Θ that *I* is buttressed on the other side by a book which has no organic connexion with any other book of the *Iliad*, a fact recognized by some ancient scholars at least who held that Homer composed *K* as a separate book not intended to form part of the *Iliad*.² Further, it is shown to be later than the *Odyssey* in that here and here only in the *Iliad* is Odysseus

¹ Hampe, p. 63, pl. 42. That some of the more barbarous features in Greek mythology have come down by direct descent from the Bronze Age is a possibility greatly strengthened by the facts presented by R. D. Barnett, *JHS.* lxx (1945), pp. 100 ff.

² Schol. T ad init.

associated with the bow. Though surely a peculiarly inappropriate weapon for a night reconnaissance, one is lent him (260) by Meriones, evidently selected as a Cretan, and he finds it useful as a stick when he removes the horses of Rhesus (513-14). The archery of Meriones itself lies under some suspicion of being an addition to the original narrative.¹ A curious if trivial point of contact between Θ and K is the unheroic scale of the reward promised by Aias to Teukros in the event of successful marksmanship (Θ 287 ff.) and by Nestor to anyone who will undertake a particularly dangerous mission under cover of darkness (K 213 ff.).

That whatever the authorship the three books were inserted into the *Iliad* at one and the same time is probable but naturally not demonstrable; an examination, however, of their chronological relation to each other yields some definite results. I and K are currently classed with Ψ and Ω as 'Odyssean' books on the ground that they contain various lines and half-lines (mostly formulae) as well as a few isolated words which occur in the *Odyssey*, but which outside these books are not found, or are seldom found, in the *Iliad*. The priority of the *Odyssey*, however, in the use of these lines and words can by no means be taken, as it commonly is, for granted. Rather, they occur in these books of the *Iliad* because their subject-matter includes much that is common in the *Odyssey* (private hospitality and social relations) for which the rest of the *Iliad* offers little opportunity. Thus in I the lines 174-9, which describe the meal in the hut of Agamemnon, all recur in the *Odyssey*,² some of them more than once, but 175-6 also appear with the change of a single particle in A as 470-1 in the description of the Greeks' feast on the sea-shore at Chryse. Similarly, every line in the immediately preceding passage in A which describes the sacrifice to Apollo and the beginning of the feast recurs in the *Odyssey*, the majority more than once, while some are also found in the parallel descriptions in H and Ω ; and again, those lines which deal with ships or movements by sea (A 141, 179, 183, 312, 432-7, 475-6) naturally find counterparts in the *Odyssey*. All are formulae. The natural conclusion is that *Iliad* and *Odyssey* alike used established formulae for which the *Odyssey* by its nature offered more frequent occasion.

It follows that no separation in time between the composition of the 'Odyssean' and that of the other books of the *Iliad* can be based on the presence of lines of this type. It is indeed reasonably safe to assume that Ω was composed later than A , but A contains almost if not quite as high a percentage of Odyssean lines. Θ is either from the same hand as I or a later one, but the Odyssean lines and half-lines are remarkably few, formulaic and insignificant, freely as the author borrows from other books of the *Iliad*; principally concerned with warfare, he had no need to go outside it. Two Odyssean lines in I , however, are not formulae. One is 312,

¹ *V. supra*, p. 296.

² The Odyssean equivalents are all noted by van Leeuwen in his edition of the *Iliad*.

to which everyone will surely award priority over ξ 156; 523 is perhaps a less certain case, but seems more likely to be the model than the copy of χ 59. On the Odyssean test therefore there are no grounds for regarding *I* as later than *A*. The notable nineteenth-century separatist W. Christ assigned with other matter Θ , *I*, and Ω to one hand and that a late one, but held that a book of the type of Ω had been contemplated by the original Homer of the *Menis*. Jebb¹ endorsed the ascription of *I* and Ω to one and the same hand, partly on the ground that 'a certain emotional character more easily felt than defined' is common to both, but added 'a common particular trait—the rhetorical enumeration of place-names in passages marked by strong feeling', comparing *I* 149 ff. and 381 f. with Ω 544 ff. The comparison may be aptly extended to *A*, where the storm in the assembly prepares us for the stubborn rage of Achilles in *I* and also, since he yields to the admonition of Athena, for his ultimate surrender not only in *T* but also in Ω ; while the particular trait appears in the enumeration of Chryse, Killa, and Tenedos with some rhetorical effect in 37–8 and 451–2. In both *A* and Ω the Odyssean lines, markedly scarce in *I*, are numerous, but as has already been suggested in the case of *A*, not significant of lateness. The same is true of those which occur in Ω ; 555 (partial; cf. κ 387) and 587–8 are surely 'common stock' lines and 575 is undoubtedly earlier than ω 79, though in view of the lateness of ω as a whole that means little. Line 8, on the contrary, is an inappropriate interpolation from the *Odyssey*, in which it appears as a thrice-repeated formula applied to Odysseus; the verb $\tauολύπευσε$ in 7, naturally much more frequent in the *Odyssey* than in the *Iliad*, which has little occasion to talk about the winding up of the war, led to the insertion. $\tauολύπευσε$, however, belongs legitimately to the vocabulary of the *Iliad*, as \mathcal{E} 86 shows.² Much has been made of the part played by Hermes in Ω , and lines 339–45 reappear as ϵ 43–9; Leaf, however, points out that whereas in Ω the magic rod has a part to play in lulling the sentries to sleep, in the *Odyssey* it is entirely otiose. The passage in the *Iliad* is therefore presumably the older, but the poet of the *Odyssey* made his borrowing entirely his own by adding the vivid and truthful portrait of the cormorant, appropriate to the new setting. The function of Hermes in Ω is not necessarily a mark of lateness. Iris, superseded by him in the *Odyssey* as the messenger of Zeus,³ still plays her part here (77, 159): Hermes in this episode is not a messenger but an escort and, more than that, an escort of the dead. It is his chthonic character that makes him peculiarly suited to his mission here. Like the few other deities on the Trojan side; with the exception of the figures of Ares and Aphrodite used

¹ *Introduction to Homer*, p. 162.

² Oddly enough it is Odysseus who uses the word.

³ I.e. for the purposes of the *Odyssey*. Iros, the nickname given by the Sultors to the beggar who carries their messages, shows that in the general estimation her status was unchanged. Hermes as the giver of wealth and good luck is naturally more prominent in the *Odyssey*, a poem of peace, than in the *Iliad*.

for comic relief, he plays an obscure part in the *Iliad*; yet he is mentioned several times in unimpeachable contexts and in Ξ 490-1 his function of wealth-giver is hinted at as unobtrusively as his connexion with the dead is here.

In the matter of vocabulary the list of Odyssean words in Ω is fairly long, but some have no chronological significance;¹ thus τετράκυκλος and πείριος owe their unique appearance in each poem to the mention of a cart or wagon, which is not an ordinary adjunct of epic life. φωριαμός appears once in Ω (228) and once in the *Odyssey* (ο 104), which prefers the synonym (so far as we can judge it) χηλός, and χηλός also occurs in one passage in the *Iliad* (Π 221 ff.). We should expect the abstract nouns πρῆξις, δεικείη, λύσις, γονή, ἐξεσίη to have some importance, but only πρῆξις occurs more than once in the *Odyssey*, and only in a conventional line used twice in κ (202 and 368) has it the sense of profit in which it is used in the *Iliad*. All that can be said is that these words were slowly establishing themselves in the stately vocabulary of epic. The separatists meant no more than this, and in fact the earlier representatives of the school put the date of the so-called Odyssean books much higher than recent scholars are disposed to do. Thus Grote put the date of the completed *Iliad* above 776, Christ not later than 800, whereas Leaf makes the period of its Ionian development last from, 'perhaps, the ninth century B.C. to the seventh', but adds that 'it is probable that but small and unimportant additions were made to "Homer" after the end of the eighth century or thereabouts',² a very reassuring judgement for the archaeologist who has been led by the consideration of purely archaeological evidence, some of it unknown to or not used by Leaf, to precisely the same conclusion. Neither archaeological nor linguistic evidence has afforded any valid reason for assuming any such interval in time between *A*, *I*, and Ω as would exclude unity of authorship.

With *K* the case is different. It is perhaps not strictly correct to say that the association of Odysseus with the bow proves in the author knowledge of our *Odyssey*; the hero would certainly be presented as an archer in the poem on the Return of Odysseus which must have preceded our *Odyssey* even as one on the *Menis* of Achilles preceded our *Iliad*. Since, however, there is no other allusion to him in this character in the *Iliad*, it seems probable that only after the 'publication' (so to call it) of our *Odyssey* did the novel figure acquire a vogue sufficient to introduce him into the *Iliad*. Further, *K* seems to contain some genuine borrowings from the *Odyssey*; 243 is a manifest appropriation of α 65 and 483 of χ 308, also borrowed by ω 184. The opening words (νύκτα δὲ ὀφθαλγῶν) of ι 143, unique in the *Odyssey*, appear thrice in *K* (83, 276, and 386). The adjective appears nowhere else in *Iliad* or *Odyssey*. Virtual certainty in these cases extends

¹ The pitfalls which beset the scholar who makes an uncritical use of vocabulary as a test of date are admirably exposed by Monro, *Od.* xiii-xxiv, p. 334.

² *Iliad*, i², p. xvi.

the probability of being borrowed goods to 27-8, 158-9, and 292-4, which might, however, pass muster as common stock, while the preposterous appearance of the ἀσάμβλοι in 576 can only be due to misappropriation. As Leaf has pointed out, the story of the Doloneia has a certain affinity with incidents related in the *Odyssey* (8 240 ff., § 468 ff.), and the close relation of Athena and Odysseus is also Odyssean.¹ On the other hand, the considerations which induced Leaf to date the book to the second half of the seventh century lack substance, and there is something to be said in favour of regarding the insertion of *Θ* and *K* as parts of a single operation. It is not impossible that the books are the work of a single author. *Θ* is a highly skilful pastiche whose author may in *K* have followed his natural bent and seized his chance to enshrine that book also in the *Iliad*. If he did, his reward for performing the same service for *I* is not too high.

The chief remaining episodes which have been impugned as interpolations in whole or in part are the *Making of the Arms* and the *Funeral Games*. As regards the first, the writer adheres, except in a few points of detail, to the views expressed in an article published in 1929,² viz. that in the Shield of Achilles we have a traditional set piece which, originating in the period when Mycenaean art first fell under the dominating influence of Crete, had preserved features dating back to that period, though doubtless losing many in the course of its descent through the centuries, and to which Homer made some contributions based rather on scenes of actual life than on works of art, but which had suffered little from later accretions. The only archaeological detail that need be added here is an indication that the introduction to the actual ὀπλοποιία contains a feature peculiar to the Geometric age in the wheeled tripods which form part of the furniture in the house of Hephaistos. An example of this remarkable form recently came to light in a submerged cave in Polis Bay in Ithaca excavated by Miss Benton,³ and another is known from the Idaean Cave in Crete; its type can be dated to the Geometric age and none of a later (nor, incident-

¹ It is, however, generally overlooked that we have had a hint of it in *B* (166 ff.), where it is as the direct instigation of the goddess that Odysseus intervenes to stop the rush to the ships. Hera's instructions (155 ff.) did not mention him, and the trivial introduction of his herald Eurybates, the only Ithakesian mentioned in the *Iliad*, to pick up his cloak (183-4) suggests some amount of post-Odyssean interpolation here.

² *JHS*, xlii: see pp. 146 ff. The lines which deal with the Ker (535-8) the present writer would now regard as an undoubted interpolation, borrowed from the *Scutum* (156-9); the description may be based on some form of the exceedingly frequent representations of the Pharaoh dealing with his enemies. See, e.g., the design on some of the series of engraved Phoenician bowls, *P. et C.* iii, pp. 759 and 771; figs. 543 and 546, and Poulsen, *Der Orient*, p. 28, fig. 20. For a later example compare the comic version of Hercules slaying Busiris on a Caeetan hydra (*Muz.* 152-3).

³ See *The Evolution of the Tripod-leher*, *BSA.* xxxv, pp. 88-9 and figs. 9 and 15 on pp. 58 and 65. Though the tripods are of Greek manufacture, the wheels are due to Oriental, or more specifically to Cypriot, influence; i.e. they cannot be earlier than the eighth century and probably come some way down in it. As elsewhere, the gods are allowed contemporary luxuries denied to heroic society.

tally, of an earlier) date is known. In fact, the tripod of whatever form seems to have gone out of favour in the seventh century, both as a prize and as a votive offering.

The *δολοποιία*, however, has a function of its own in the narrative of which neither *Iliad* nor *Odyssey* has any further example. The similes which so often decorate the stark stretches of military narrative come nearest, not merely in the relief and variety which they afford, but in the freedom they allow the poet to describe contemporary and everyday life. One of the scenes on the shield, that of the Besieged City, is undoubtedly based ultimately on some work of art, or rather perhaps on a series. Appearing in Egypt as far back as the proto-dynastic period, it is first seen in Greece on the silver rhyton of Shaft-grave IV and figures in the frescoes which decorated the megaron of Mycenae when it perished by fire four or five centuries later.¹ After that we meet it no more till it reappears engraved on the bronze bowl of Amathus,² Phoenician work of the seventh century. The theme had probably been often handled in heroic poetry before it was finally enshrined in the *Iliad*; here the poet pays a perfunctory tribute to the tradition of metal inlay by describing as golden the figures of Ares and Athena, who, as Leaf points out, furnish the one specifically Hellenic touch in the description of the shield. The trial scene has not and never can have had any counterpart in art, nor, so far as our evidence goes, had the wedding processions. We may suspect that the City in Peace was composed by Homer himself to form a pendant to the City in War; it is noticeable that in the whole passage there is no colour epithet to betray a reminiscence of inlay. Even for us it is one of the most living scenes in the description of the shield, and its effect on contemporaries must have been much stronger.

There are other indications that the author of the *Iliad* was seeking to burst the restrictive limitations of the heroic tradition and depict the life of more ordinary human beings; but he could achieve his end only in a disguised form. One of the restrictions which hampered him was the very small part which women could play on the heroic stage; it is a natural consequence of this that in the entire *Iliad* there is no instance of one woman addressing another. The divine family on Olympus, handled throughout the *Iliad* in a completely Ionian spirit, is exempt from heroic restraint. We have had a taste of their quality in *E*; it is further displayed in the *Theomachy*. This episode is often impugned as a piece of late and inferior work, but if the Olympian part of *E* is, as we have seen reason to believe, an integral part of our *Iliad*, it can hardly be asserted that the *Theomachy* is not. Equally, it is impossible to prove that it is not the work of an imitator of *E*, of which it takes account throughout. The first of the two relevant books, *Y* and *Φ*, contains in the encounter of Achilles and Aineias (75-352) at least one major interpolation which can be got rid

¹ *P. of M.* iii, pp. 8: ff.

² *JHS.* liii (1933), pp. 25 ff.

of at a stroke. The *Theomachy*, however, cannot be so treated; it is skilfully interwoven with the main theme and cannot be removed by a simple excision. None the less, the structure of the two books is open to just and severe criticism which cannot be examined here in detail; the reader has at his disposal the searching analyses of Leaf and Wilamowitz,¹ which should be consulted throughout. One or two of the major features, however, call for comment. There is a certain resemblance to *N* in the long tract of narrative which separates the summoning of the divine assembly at the beginning of *Y* from the Olympian battle in *Φ*, but it is superficial; the serial treatment of contemporaneous events plays no part here. That their sequence is genuinely serial is shown by the fact that in both books (*Y* 438-50, *Φ* 284) the Olympians interfere on the plain of Troy and are consequently not available for warfare in heaven. The gap is narrowed, however, by the excision of the Aineias episode, which can be rejected without hesitation. At one point in it the hand of Athens is again apparent, viz. in the intrusion of Erichthonios into the lengthy pedigree of Aineias (219, 230). The date and the motive are those of the Athenian interpolation in *Z* (p. 446 *supra*),² viz. the desire of the Athenians c. 550 B.C. to support their claim to Sigeum by establishing a religious sanction, in this case by the production of a common divine ancestor of the royal houses of Athens and Troy. The interpolator is betrayed by his transference to Erichthonios of the famous mares given as compensation for the rape of Ganymède; Tros is the recipient both in *E* 265 and in the *Hymn to Aphrodite*, 207 ff. This does not necessarily imply that the whole episode is of Attic origin; the Athenians probably availed themselves of a local lay, of a sort which may have been recited to alleged descendants of Aineias in their halls. The Athenians may have secured the support of some petty princely house, half-Hellenized and, as Malten suggests in the case of the Lykian princes, anxious for recognition.

After the elimination of the Aineias episode the gap between the prologue to the *Theomachy* (*Y* 4-74) and the beginning of the battle on Olympus (*Φ* 385), though reduced, is still considerable. It might be further narrowed by the excision of the fight with Asteropaïos, but the only solid objection to this is that its poetic quality is not on the same level as that of the immediately preceding slaying of Lykaon. More detailed accounts of the defenders of Troy are entirely in place as the tide of battle sweeps nearer to the doomed city, and the individual character given to the hero's last fight by the fact that he is ambidextrous is quite in keeping with the style of our poet. We may compare the death of Mydon which as described in *E* 585-8 preserves the only known record of the condition of cadaveric spasm earlier than the observations of German doctors made in the Franco-

¹ Introductions to *Y* and *Φ*; *Die Ilias und Homer*, pp. 80 ff.

² Fick, *Die homerische Ilias*, pp. 511-12; Leaf, *ad loc.* Cf. Strabo, 604 *sub fin.* The existence in Attica of a deme once called Tros has no independent support and betrays once more the Athenian interpolator. See Leaf, *Strabo on the Troad*, p. 245.

Prussian War of 1870.¹ The gap therefore remains and must be ascribed to the difficulty which the poet encountered in presenting a complicated narrative in which he had not an entirely free hand.

The questions involved are too complicated to be discussed in detail here; few, however, will quarrel with the conclusion of Wilamowitz that what we have is the combination of a new with a traditional element—of the *Theomachy* with the beginning of the *Vengeance of Achilles*, which includes the *Fight with the River*. The latter must certainly have stood in some form in the *Menis*, but unconnected with any battle in heaven. The union of the two themes is skilfully effected by the introduction of Hephaistos, for whom the way is paved by his appearance in the prologue (Y 1-74), into the *Fight with the River*: an effective *dénouement* for that tale is thus provided, and the action on earth is linked to that on Olympus by the persons of Hephaistos and Hera. Difficulties within the Skamandros episode remain, but the most serious, the apparent promise of Achilles (Φ 223) to abstain from slaughter in the river-bed, so instantly disregarded, is removed if we suppose the words to have been spoken ironically, a point which would easily be made clear in recitation. Whatever the form of the *Fight with the River* in the *Menis*, we may be sure that the wild splendour of the narrative in Φ is the work of the poet of the *Iliad*.²

The real objections felt by the modern reader to the Olympian scenes in the *Iliad* are their incongruity with the tragic tale of human destiny which they interrupt and the absence of reverence for the divine. The first should present no difficulty to ourselves who applaud the Porter's scene in *Macbeth*; the second overlooks the fact that the Olympian interludes are sophisticated and are addressed to an aristocratic and Ionian audience. When Herodotus, Ionian in culture if not by domicile, tells us that Homer and Hesiod created the Greek theogony and what may fairly be called the personalities of the gods, he feels no need to apologize for them; men indeed had arisen before his birth to denounce them, but this merely indicates that they were generally accepted. Incidentally it may be noted that the early apologists of Homer such as Theagenes of Rhegium are at least as much concerned to rationalize the gods as to make them moral.

Ethical objections entertained by modern scholars are beside the point; submitted to this test, the *Διὸς ἀπάτη*, justly admired by Leaf, must fall a victim no less than the *Theomachy* which he strongly disapproves. The real touchstone is the poetic beauty and dramatic value of the Olympian interludes; and here we may well ponder the famous dictum of the author of *Περὶ ἡρώων*: τοὺς μὲν ἐπὶ τῶν Ἰλιακῶν ἀνθρώπων θάσσιν ἐπὶ τῇ δυνάμει θεοὺς πεποιθέναι, τοὺς δὲ θεοὺς ἀνθρώπων. If, as has been suggested above,

¹ Otto Körner, *Die ärallichen Kenntnisse in Ilias und Odyssee*, p. 40.

² One trivial trait links the Fight to Z, viz. the exceptional aorist ἀγο-ἔπον, -ἔπον, -ἔπον found in place of the normal ἀπῆλπον, etc., only in Z 348 and Φ 283 and 320. On the last passage Scholl. AT comment *Kampf der Märis*. We may recall the isolated χροσθ in E 138.

part of the poet's object is to illustrate in the Olympians the unheroic side of human nature, the representation must none the less be made to scale; the gods cannot be reduced to ordinary human dimensions. Hence they are like the exaggerated figures of Old Comedy in which some human traits are emphasized and the rest ignored. One scene indeed approximates to the actual in ordinary, or rather in low life, and is probably responsible for the special disfavour with which the *Theomachy* is regarded, while for the same reason the modern reader, whether he approves it in its present place or not, finds it much more genuinely comic than any other of the Olympian contributions: viz. the encounter of Hera and Artemis and the latter's discomfiture. As in the case of Ares and Aphrodite, the choice of victim is significant. It will be remembered that even in classical times and in mainland Greece, Artemis is a goddess of equivocal character, retaining many savage traits; it is probable that in the eighth century the Artemis of Ionia was but a very partially Hellenized version of the Anatolian goddess and an object of veneration only among the native population, in other words a natural butt for Ionian wit.

It is possibly not accidental that one of the similes which gave most trouble to eighteenth-century translators in the grand manner—that of the boiling pot—occurs at the very end of the fight between Hephaistos and Skamandros (362 ff.) when the action is about to be transferred to Olympus; whether intentionally or not, it marks the transition to a lower and gayer poetic level. The simile is one of those in which the poet alludes to a practice—here that of boiling instead of roasting meat—known to himself and his contemporaries, but strange to the heroic world. A second example is the comparison of the voice of Achilles to the blast of a trumpet (Σ 219), and the idea recurs in Φ 388, where the heavens are said to give forth a trumpet note. The *Making of the Arms* is recognized in both Υ (268) and Φ (165), and it might be supposed that this freedom in the technique of the simile was a mark of the lateness with which the three books are often charged. There remains, however, yet one example—that of horse-riding—and it occurs in quite a different part of the poem, viz. Ο 679 ff.

The distribution of the 'low' type of simile is equally impartial. In the eighteenth century the boiling pot itself stood in no greater need of defenders than the donkey resisting the efforts of the small boys to get him out of the corn; yet this comparison applied to Aias in his slow retreat before the Trojans occurs in Α (558 ff.) and Α is accepted on all hands as an indispensable and indisputable part of the *Menis*.¹ Here we get a touch of humour, elsewhere a broad humanity for which the heroic poem gives little scope. The poor woman practising the sub-heroic virtue of ἀληθείη (whatever its precise meaning)² marks the supreme moment of the fight for

¹ Even Madame Dacier, who defends the simile on the ground that the ass was held in higher estimation in Homer's day than her own, could not bring herself to name the obnoxious beast in translation, nor could Pope.

² 'Truth-telling', the sense of ἀληθείη in its two appearances in the *Iliad* (Ψ 361, Ω 407).

the Greek wall (*M* 433 ff.) and is immediately preceded by that of two peasants contending over their boundaries for a hand-breadth of cultivable soil. Similes of the 'modern' type cannot, those of the 'low' type do not, appear to be traditional; they may reasonably be regarded as a hall-mark of our poet.

In the Olympians we naturally look for no touch of pathos, but there is a similar diversion to the non-heroic aspects of human nature on a super-human scale. To pass from Olympian elements in the *Iliad* to the world, divine and human, of the *Odyssey*, is like passing from the Old Comedy to the New, and if similes are less thickly strewn in the *Odyssey*, some of the human beings who have figured in them step forward on to the stage.

As for the Funeral Games, it may be that they contain certain late elements due to interpolation, though so far as the actual contests are concerned the incomprehensible is more likely to arise from what was obsolete and completely forgotten when the poems came to be written down than from interpolations of the seventh or sixth century. Though the archery of Meriones and Teukros is certainly not an early element in the *Iliad*, some Minoan tradition may lurk under the strange contest of the bow, and we may note that Odysseus does not compete, as he surely would have done if the episode were post-Odyssean. That games with tripods as prizes and probably other articles as well were an established practice well before the end of the Geometric age can be shown from Miss Benton's study *The Evolution of the Tripod-keles*;¹ and as the Geometric vases whose figure decoration furnishes the evidence were found in graves and in some cases at least were probably made for them, there is a strong presumption that funeral games were celebrated at that time in Greece. To judge from the absence of any reference to them in the austere funerary legislation of Solon, they had gone out well before the end of the seventh century; not improbably they vanished in the great social changes which marked its beginning. At any rate, there is no reason to regard them as a subsequent addition to the *Iliad*; more probably they were, like the Shield of Achilles, a traditional theme. There is no need to insist on the value of either episode in the position which it occupies; we may, however, briefly consider what the concluding part of the *Iliad* would be like if it lacked the games. It has often been remarked that the *Iliad* follows in a measure the pattern of the classical tragedy, with its climax of pity and terror, its dying fall, its final calm. In the early part of *Ψ* the tragedy of Achilles reaches its climax; the poet has in view his solution of the unbearable discord, but Achilles cannot pass straight from the pyre of

is an aristocratic virtue, except, as someone has remarked, in love and war. It is demanded of Phoenix only on a civilian occasion and in a matter of sport, and of an apparent social inferior by Priam. *ἀσθῆναι* is comparatively frequent in the *Odyssey* with the meaning 'a true statement of the facts', always given by Odysseus when circumstances render it advisable (η 297, λ 507, &c.). The epithet of the working woman perhaps means 'conscientious'.

¹ *BSA.* xxxv, pp. 102 ff.

Patroklos to meet the father of Hector face to face. The games, part of the regular ritual of a great funeral and probably handled in the *Menis*, bring him into closer and more normal relations with his fellows than he has yet had since his first withdrawal to his tent. Vengeance has assuaged his anguish so far as may be, and he inaugurates the games with sombre courtesy, austere excluding himself from any participation in the contests. Thus the way is prepared for the only scene in the *Iliad* in which a normal or nearly normal human situation is presented—and presented with brilliant success. The actors are indeed heroes, but they are not on their heroic behaviour. Weaknesses and inconsistencies in the narrative are convincingly criticized by Leaf in his Introduction to the book; it cannot be doubted that in some passages two hands have been at work. This is consistent with the view that the Games were included in the *Menis* and that the established version, no doubt very popular, hampered our poet in his handling of them. In the great event of the chariot-race he has imposed his will. It has often been argued that the original race had a different victor, and it is certain that the divine mares of Diomedes cannot have figured in the *Menis*, but the poet of the *Iliad* might naturally wish to recall *E* and honour the hero whom he had brought into prominence. There is, however, no reason to limit his original work to the chariot-race; the characterization is throughout of a high order and may well be credited to the poet of the *Iliad*, however much of his predecessor's work he embodied or remodelled. We can never hope to isolate virgin relics of the *Menis*. With the 24th book our doubts cease; there is not the smallest reason to suppose that the *Menis* included a Ransoming of Hector.

The available evidence supports the conclusion that in the *Iliad* we have in the true sense an epic, i.e. a great poem which owes its structure to substantial unity of authorship. It is true that, even if we accept the *Presbeia*, it has not precisely the form which its author designed to give it; on the other hand, even if we discard *ΘIK*, we have still an epic of the first magnitude in every sense of the term and in mere bulk exceeding the *Odyssey*, whose theme has been stretched to the uttermost to provide a twin for it and which includes in addition several considerable interpolations. It is obvious that an epic on this scale cannot have been the first of its kind and few will quarrel with the assumption commonly made that it rests on an earlier poem, the *Menis* of Achilles. That this poem also must have deserved the name of epic is plain on a consideration of its indispensable contents—the quarrel of the two chiefs, Achilles' withdrawal, the Trojan successes and attack on the Greek camp, the intervention and death of Patroklos, the return of Achilles, the slaying of Hector, and, in all probability, the Funeral Games. This goes far beyond the scope of a heroic lay or an evening's entertainment as provided by Phemios or Demodokos; it must have been designed for the same type of audience and occasion—presumably a public festival—as the *Iliad* itself. This again

presupposes the existence of some such organization for the production and preservation of epic as we have found it necessary to postulate in the case of the *Iliad*. If Homer's career as a poet began not later than the last third of the eighth century and possibly rather earlier, it is not unreasonable to carry back the production of epic to c. 800, a date whose relation to that of the Ionian migration the evidence at present available unfortunately does not allow us to judge. What form of poetry, what form of organization, the prospective settlers carried with them we cannot hope to know. We cannot even discern, however dimly, the lineaments of the author of the *Menis*, for we cannot hope to discriminate between material which the poet of the *Iliad* incorporated approximately in the form in which he received it and that which he refashioned, apart from what is purely his own creation. Traditional material is probably to be found mainly in the battle-scenes of *A-P*, where almost alone in the poem we find anything that can be described as stereotyped; *A* on the other hand, though essential to the story of the *Menis* and therefore claimed by some Separatists as early, surely owes its form to the poet of the *Iliad*. So masterly a marshalling of the chief dramatis personae has nothing experimental about it; it is the work of one fully alive to the problems of construction, even if in the sequel he has not fully solved them. It seems right therefore to speak of 'the' poet of the *Iliad*. One would fain ascribe to 'Homer' the work which heads the majestic roll of European literature, but usage and convenience of reference compel us to extend the term to include the *Odyssey*. There is of course no evidence that the two poems are by the same author and appearances point the other way. Only the belief that the ancient account of Homer was founded on tradition and not an example of myth-making, coupled with the *unus color* of the Homeric language, could have maintained the conviction so long; it has little support to-day.

2. THE COMPOSITION OF THE ODYSSEY

That the Hero's Return in the simple form of the Bow-fight and the *ἀπόλογοι* told in the hall of Alkinoos had originally no connexion with Odysseus is generally admitted. The bow, the vital instrument of victory and revenge, has been shown to be the Asiatic composite bow which the Greeks never themselves used and with which, after the Bronze Age, they first became acquainted when they settled on the east side of the Aegæan;¹ the tale therefore must be of Anatolian origin. Whereas the *Menis* which contained the germ of the *Iliad* may for aught we know have originated in mainland Greece, the Bow-fight which contains the germ of the *Odyssey* must have been first sung in Ionia. Since the *ἀπόλογοι* stand apart from the other great heroic myths, those, e.g., of Jason, Herakles, Theseus,

¹ Doubtless it had been known to the Greeks of the LH III settlements in Anatolia, but there is no reason to suppose that the knowledge survived the Bronze Age.

Oedipus, in that they are not associated with Greece or with any known localities, it is reasonable to assume that these tales also were first heard by the Ionian settlers in their new home. How they came to be associated with the hero of the Trojan War it is impossible to say, but the identification must have been made before the poet of the *Odyssey* set to work on his great epic. Here and there traces remain of the incorporation of earlier versions. The description of the garden of Alkinoos¹ appended, with an unaccountable change of tense, to that of the palace is a convincing example. There seems also to have been an earlier version of the Bow-fight in which Odysseus revealed himself to Penelope beforehand and husband and wife planned the contest of the bow together.²

The poet's sources, however, are by no means all Anatolian. Crete crops up repeatedly in the false tales told by Odysseus in Ithaca and the curiously exact knowledge shown of the Bronze Age port on the south coast of the island near Phaistos³ has been noted above. Other traces of the Bronze Age are the allusion to the wealth of Egyptian Thebes, the supremacy of a Greek king in Cyprus, the knowledge of Syria implied (as the history of Ugarit perhaps justifies us in asserting) in the tale of Eumaios.⁴ The Cretan element may be derived through the Cretans, whose participation in the foundation of certain Ionian states (Colophon, Miletus, Chios) has been somewhat unreasonably questioned;⁵ they must have brought their traditions with them and may have added their quota to the repertory of heroic lays in hexameter verse. The allusions to Thebes and Syria, however, are quite as likely to have been transmitted by the main stream of Mycenaean tradition.

The puzzling account of Odysseus' kingdom, though it cannot be dealt with in detail, also points to diversity of sources. The entry in the *Catalogue of Ships* is, together with the preceding entry, an interpolation designed to accommodate Meges in a realm which he enjoys neither in the *Iliad* nor the *Odyssey*⁶ and need not detain us; yet in the body of the former poem Odysseus is described as ruling over the Kephallenians⁷ who in the *Odyssey* are confined to the mainland and are not said to be his subjects; that is to say, the state of affairs described in the *Odyssey* is older than that reflected in the *Iliad* and may well go back to the Bronze Age.

When we turn to the *Odyssey* itself we find that the account which Odysseus gives of his home⁸ is in every vital respect inapplicable to the island which as far back as we can trace its history has borne the name of Ithaca, or, in modern form, Thiaki. Only the forces of tradition and

¹ v. 103-30. Presumably it was incorporated when our *Odyssey* was first written down.

² It is alluded to in the suspect *ss* (167-9) and is one of the grounds for regarding it as an addition to the original work.

³ v. 293 ff.; cf. pp. 93-4.

⁴ *V. suprà*, pp. 82-3.

⁵ It is strongly maintained by Wilamowitz, 'Über die ionische Wanderung', *Pr. Ak. Wiss.*, 1906, p. 75.

⁶ *Cl. N* 691-2, *O* 518-20.

⁷ *A* 330.

⁸ v. 21-6.

prejudice could have sustained the orthodox identification wholly unmoved by Dörpfeld's contention that Homer's Ithaca was Leucas. It is true that Dörpfeld, as usual, overstated his case; moreover, his unscientific approach to problems outside his special province had already begun to obscure the services which the great excavator had rendered to the cause of learning. Almost alone in Great Britain Leaf, after visiting the island and carefully weighing the evidence, decided in favour of Dörpfeld's theory, which can best be studied by English readers in the relevant chapter of *Homer and History*.¹ Only a brief summary of the arguments can be given here. It may be premised that the case does not present the simple issue assumed from their opposite points of view by the champions on either side.

Taking the main points in the hero's description, we note:

1. Whether ζόφος means the west, according to the general belief of the ancients and their recorded, though erroneous, testimony about this particular coastline, or (as is very unlikely) the north-north-west of its real direction, the description πανπεράτη εἰς ἅλι κεύθαι is inapplicable to Thiaki and appropriate to Leucas.
2. Leucas must have been named in this enumeration of four islands forming a group; Strabo's solution that before the days of the Corinthian occupation Leucas was not regarded by the Greeks as an island but as a promontory has now been definitely abandoned, scientific opinion having declared that it has always been separated from the mainland by water. It cannot be Doulichion, as some moderns have supposed, for the ship proceeding from Thesprotia to Doulichion on which Odysseus in the character of a Cretan adventurer claims to have taken passage put in at Ithaca on the way thither (§ 324-34). Doulichion, which is repeatedly called πολύπυρος and once ποιήεις, is Kephallenia, and Same, always coupled with Doulichion, is Ithaca.
3. Thiaki has no outstanding peak; it is a rugged ridge rising abruptly from the sea and except for a dip in the middle has a roughly uniform height, running from a little below to a little above 2,000 feet.² Nor is it from any point of view a conspicuous object (εὐδείεος). From any ship making for the islands up the coast of Elis or from the Gulf of Corinth Leucas with a peak of 3,800 feet is seen towering above the numerous small intervening islands and Thiaki as a moderate ridge squatting in front of Kephallenia, whose highest peak is something over 5,200.
4. χαμαλῇ has been explained in two ways: (1) the island has much flat land, contrasting with the peak, which appears to be the meaning when the term is applied to Circe's island (κ 194-6); (2) it lies close

¹ On the other side see Lord Rennell of Rodd, 'The Ithaca of the Odyssey', *BSA*. xxxiii, pp. 1 ff., and *Homer's Ithaca*; Heurtley, 'Excavations in Ithaca I and II', *BSA*. xxxiii and xxxv, especially xxxv, p. 44.

² 2600 up. Leaf, *op. cit.*, pp. 147, 148, is a printer's error. εὐδείεος as an epithet of Ithake recurs throughout the poem, but as it always occupies the same position in the line, it probably owes its frequency to metrical considerations alone.

inshore. This latter interpretation is supported by the use to-day of the kindred word *χαμηλά* by Greek sailors (verified locally by members of the British School of Archaeology at Athens since the publication of Leaf's book) and by the use in the text of *ἐφοῦ* with the meaning 'far out in the water' (δ 785, θ 35). It is obvious that neither description applies to Thiaki, which except for the tiny strip on which the little port of Vathy stands has no flat land whatever and is separated by 20 miles of water from the coast of Greece.

To the account of Odysseus we may add the fact that in φ 347 Telemachus contrasts by implication the island of Ithaca with those others of the group which lie in the direction of Elis, again a trait which perfectly describes the position of Leucas and is wholly inappropriate to that of Thiaki.

It is as certain as any statement about ancient geography can be that in these two passages, viz. those in ι and φ, both of which regard the island in relation to points outside it, Ithaca is Leucas.

As already said, however, the case is far from simple. The standard epithets of *Ἰθάκη* are *κραναή*, *τρηχεία*, *παμπάλοσσα*, epithets which Leucas of the four islands deserves perhaps least, Thiaki certainly best, and they are interwoven with the whole texture of the narrative. *τρηχεία* occurs in the line which follows immediately on those just quoted from the hero's own description of his home, and *κραναή* has even made its way into the *Iliad*.¹ Telemachus emphasizes the point when he declines Menelaos' offer of a chariot and three horses, stating in the most explicit terms that while none of the isles is good for pasturage or horse-driving, Ithaca is easily the worst, having no roads and no pasturage and being fit only for goats.² This description perfectly fits Thiaki and is not applicable to any of the remaining three. Once and once only Ithaca is called *πίον*, and that unique epithet occurs, significantly, in the tale of the boar-hunt on Parnassus³ in which the young Odysseus got a wound. This story must have originated in mainland Greece; whether the Ionian settlers carried it with them across the Aegean or the poet received it later, we cannot tell. Kirchhoff and Wilamowitz scented an interpolation, but the latter admitted that the episode could not be dealt with by simple excision.⁴ Monro, while admitting the strength of the German scholars' case, notes that there is no trace of a later date in the style or language.⁵ The facts seem best explained if we suppose that the poet of the *Odyssey* was acquainted with a lay of mainland origin germane to his subject and incorporated it with all necessary adjustments in his own elaborate structure, developing if he did not invent the motive of the scar, essential to his own handling of the Hero's Return.

¹ Γ 203.

² φ 587-608; i.e. a chariot and pair, the proper heroic team. The third, the trace-horse, pulled no weight and served as a relief.

³ τ 399.

⁴ *Homerische Untersuchungen*, p. 39.

⁵ *Od.* xiii-xxiv, ad loc.

If we admit the change of island names, it is certain that that of Ithaca had passed from Leucas to Same (Thiaki) well before 700; the latest possible occasion is the Corinthian occupation of Leucas, which must have accompanied if it did not precede that of Corcyra and consequently cannot be later than 734. It is likely that the change of population which brought about the change of name took place much earlier, probably in the period of confusion which followed the collapse of the Mycenaean régime at the end of the Bronze Age. The description in the *Epipoleis* of the subjects of Odysseus as Kephallenians makes it certain that Doulichion was already inhabited by that people and highly probable that in everyday life it was known by their name. It is hard to see why the theory that a body of the population of Ithaca-Leucas left or were expelled from that island and, settling on Same, gave it the name of their former home should have met with such violent criticism as it has encountered. Examples of such transferences abound, as the examples of England and Scotland suffice to remind us; and Megale Hellas affords a relevant example nearer the region with which we are concerned. As the change could not at once be made absolute and registered, like the substitution of Oslo for Christiania, Leucas, if the migration took place early, may well have continued for a long time to share the name of Ithaca with Thiaki and been definitely re-named or confirmed in the use of an alternative only as a consequence of the Corinthian occupation. The name of White Island would naturally first be given by foreign sailors who knew the white cliffs as a sailing mark, and those sailors may have been Corinthians. For the assumed ambiguity of Ithaca the name of Britannia as used by the medieval chroniclers affords a parallel; only the context can determine in any given case whether the reference is to Brittany in France or to this island.¹

To sum up, in favour of Leucas as the original Ithaca we have the two passages quoted from α and ϕ , the relative positions of Ithaca and Doulichion as given in the Thesprotian passage, and the epithet *παῖον*. How late the tradition survived we cannot tell; it seems to have been followed by the poet of the Delphian part of the Hymn to Apollo (427-9) early in the sixth century, but it had evidently perished before Alexandrian scholarship addressed itself to the task of elucidating Homer.

This hypothesis makes intelligible the double view of Ithaca presented in the *Odyssey*. The crucial passage (α 21-6) is derived, directly or indirectly, from a source in which the geography of the Bronze Age was preserved; possibly something like it stood in the original entry in the *Catalogue of Ships*. Practically everywhere else the poet describes the Ithaca of his own day.

The story-teller who develops a complicated plot involving frequent

¹ As late as the seventeenth century Burton feels it necessary to distinguish 'Little Britain in France' (*Anatomy of Melancholy*, Part II, Sect. II, Mem. 3), but this is doubtless because the Union of the Crowns had recently given birth to the new title of Great Britain.

changes of scene must, if he aims at producing an impression of reality, carry a map of operations in his head. Modern writers of this type from Scott onwards generally select a country-side with which they are well acquainted, sometimes equipping it with fictitious names, and thus attain a consistency in their setting which although few readers are consciously aware of it contributes to the illusion of actuality achieved. Trollope, in whom very little depends on geography, is consistent in the distances which separate Hogglestock and Framley, Barchester and Silverbridge, simply because he knows where all his places are, even if some of them are imaginary. Hardy's map of Wessex shows how the movements of his characters are controlled by the actual topography of Dorset. If the tale trespasses on the domain of history, then the real names must be preserved; and the modern writer, though he does not feel himself precluded from making minor changes in the landscape to suit the exigencies of his tale, will probably, in preface or footnote, call attention to his lapse from veracity, an expedient denied to the epic poet. In the eyes of the ancient Greek, epic had undoubtedly some of the quality of history, and the author of the *Odyssey* certainly meant the stage on which his human actors move to be real in a sense in which the islands of Circe and Calypso are not. Sir William Gell, pioneer champion of the Ithakists, makes a pertinent remark on the difficulty of working with a purely imaginary stage when he enumerates certain trifling occurrences which 'afford a strong presumption that the Ithaca of Homer was something more than the creature of his own fancy, as some have supposed it; for though the grand outline of a fable may be easily imagined, yet the consistent adaptation of minute incidents to a long and elaborate falsehood is a task of the most arduous and complicated nature'.¹ Gell was not happy in all his identifications of Odyssean sites on Thiaki, but no one of the Ithakist school has ever doubted that of the spring Arethousa and the cliff *κόρακος πέτρα*² on the east coast near the south end of the island. Indeed, the numerous points of coincidence between landscape and poem and the suitability of the site to the movements of the characters in relation to it seem to be beyond the reach of coincidence and to argue personal knowledge in the poet.

These features cannot have been received by tradition, for there is nothing traditional in the framework of the *Odyssey*, within which the various actors are brought by converging paths to the final scene; and it is precisely in the narrative of this stage-management that the indications of

¹ *Geography and Antiquities of Ithaca*, p. 23. In the simpler language of Polybius (xxiv. ii. 4) τὸ πᾶντα ἐκτίθειν οὐ μὴδὲν οὐδ' Ὀμηρεῖον. The latest and best statement of the Ithacan case is that of the late Lord Rennell of Rodd.

² p. 407-10. Gell states that the cliff was known locally as Korax or Koraka Petra (op. cit., p. 16), but in view of the virtual depopulation of Ithaca in the Middle Ages it is most improbable that this indicates continuity of tradition, not at the date in question (1806) is it likely that the name had been introduced by wandering classical scholars. Continuity of habits in *Korax korax*, probably *Laurencei Hume*, is the most likely explanation.

locality within the island occur. Those which relate it to the outside world are put into the mouths of Odysseus and Telemachus and have no connexion with the course of the action on the island. If the information about Thiaki does not come from tradition, neither can it have been acquired in Ionia, as must be admitted when it is examined in detail. Starting with Korakos Petra, we note the combination of cliff and spring, the latter a rare boon in Thiaki and essential for the watering of the swine (*v* 404 ff.); there is even a cave for Eumaios to sleep in, sheltered from the north wind (§ 532-3). On the top of the cliff is an ideal site for the steading of Eumaios¹ or of anyone else; it was similarly occupied at the time of Gell's visit and has probably seldom or never been vacant. Taking the steading as a fixed point, we find that the movements of the characters can be interpreted without difficulty and followed on the map—the landing of Telemachus in the Bay of H. Andreas at the south end of the island and his climb up to the steading by the route followed by Gell, the longer walk of Odysseus, probably from the Bay of Dhexiá, an indentation immediately west of the entrance to the great Bay of Vathy, to the same spot, and finally the journey of Odysseus and the swineherd from it to the house of Odysseus, situated in the immediate neighbourhood of the modern Stavros, on the saddle between the bays of Phrikes to the east and Polis to the west, but very much nearer to the latter. Here and here only tradition may have played a part, for here were found Mycenaean sherds, some 50-100, and a probably Mycenaean wall. Mycenaean pottery has been found nowhere else in the island except in the sea-cave in Polis Bay, where vases were doubtless deposited as votive offerings; from the Early Iron Age onwards the sacred character of the place is unmistakable, but it probably goes farther back. Ruins of the palace may have been visible in the eighth century and have kept in mind the site of the 'great house' of the Bronze Age, the habitation not of Odysseus, but of one of the contingent which accompanied him to Troy.

The ambiguity of the position of Ithaca reappears in its relation to the island of Asteris where the Suitors post a ship to lie in wait for that of Telemachus on its return voyage. The description of Asteris² fits the island of Arkoudhi situated midway between Thiaki and Leucas, just where a ship would be posted to intercept anyone making for Leucas from the south. True, its twin bays, one on each side of a long, low, narrow spit, are in no sense harbours, being open to every wind that blows, but they are conspicuous, picturesque, and serve to identify the island, which moreover rises to a peak from which any vessel approaching Leucas from the south would be sighted as soon as she came within eye-shot. It looks as though the relevant lines were a survival from an earlier poem, possibly

¹ Gell thought that the great rock from which Odysseus offered to be hurled if he were not speaking the truth (§ 398-9) is Korax, and since the words are spoken in the steading, this is probably the case, but cannot be regarded as certain.

² *δ* 815-7.

the original Bow-fight, in which an ambush was laid, presumably for Odysseus returning to Ithaca-Leucas. The lines, however, occur in the Telemacheia, which is the invention of the poet of the *Odyssey*; if he borrowed them as he appears to have done, he converted them to his own use. The harbour for which Telemachus must make is that of Polis, the nearest point to the house of Odysseus, and the place to watch for him is near the south entrance to the channel which separates Kefalonia and Thiaki, where a rugged promontory runs out and forms one side of the Gulf of Samos. At the head of this gulf lies the modern town of Samos and the scanty remains of that of Same, one of the island tetrapolis in classical times.¹ Here the poet must have placed his island; for the only provision of Nature in the channel, the inconspicuous rock of Dascalio just south of the Bay of Polis, to which Ithakists pin an uneasy faith, is completely unsuitable in situation and fails to comply with any feature of the description.² In the light of the double position of Asteris it is possible to explain the instructions given by Athene to Telemachus for his homeward journey and his prompt disregard of them.³ In the first passage the poet of *ι* 21-6 reappears, Asteris-Arkoudhi occupies its true position and Odysseus (may we say?) is warned, presumably by Athene, to take the only safe course by sailing right outside the islands, following the west coast of Kefalonia but keeping well out to sea and finally approaching Ithaca-Leucas from the west. For Telemachus the instructions have no meaning, save indeed that he too must avoid Kefalonia, from any point on whose east coast he may be ambushed even before he reaches the mouth of the channel. He therefore lays his course first north-east or north-north-east for the Echinades,⁴ and when he has reached the latitude of the southern end of Thiaki, steers due west for his destination. On this interpretation the *πρώτη ἀκτὴ* of Ithaca (*ο* 36) should be Cape Hagios Joannis, which runs out from the east coast a little south of Korakos Petra and the islet of Parapegadha. It would be the first sighted from a ship approaching from the east; landing would be possible, and as a path from the beach joins what has always been the road from Vathy to Hagios Andreas, the tiny port on the south coast, it would be an easy matter for Telemachus to make his way to the steading of Eumaios. Cape H. Andreas, the only other possible *πρώτη ἀκτὴ*, would indeed be first sighted on the normal approach from the south, and the language in which the ship's arrival is described⁵ is more suitable to putting

¹ It is a curious fact, though without any apparent significance, that only in the two passages which concern Asteris (*δ* 845, *ο* 29) do we find the exceptional form *Samos* as sole reading in place of the regular *Same*. It occurs twice as a variant (*ο* 236, *ι* 24), but this need not surprise us when we recall the efforts of the ancients to reconcile the divergent forms (Strabo, 453).

² See Leaf, *Homer and History*, pp. 352-5.

³ *ο* 28-34, 297-300.

⁴ This identification of the *εἴκοσι θοαί* was of course a mere guess on the part of the ancients, but it is difficult to see what other islands could be concerned.

⁵ *ο* 495-9.

in at a regular harbour than to landing on a mere strip of beach. The description, however, is a matter of common form, and H. Andreas is dangerously near the mouth of the channel and farther away from Polis by the only route open to the ship of Telemachus, especially in daylight. Telemachus when he parts from his crew¹ gives no specific instructions, but it is plain that the ship must proceed up the east coast of Thiaki and round the northern end, finally turning south-south-west down the channel and so into Polis Bay. The Suitors keeping their look-out in the opposite direction from the other end of the channel were indeed outwitted.

Gell was the first to identify the haven of Phorkys where Odysseus was put ashore with the Bay of Dexiá situated just west of the entrance to the great bay or rather fiord of Vathy, which conforms excellently to the description.² There is no cave in the immediate vicinity of the shore, but some half-hour's scramble up a steep hill-face lies a remarkable cavern which adequately fills the rôle of Grotto of the Nymphs. It is of some depth and slopes steeply downwards, running from north to south; the visitor who has scrambled down from the northern entrance, that open to mortals, and reached the lower end some way to the south, looks up and seeing the sky through a large hole above his head realizes that he has found the entrance of the gods. The cave contains many stalactites, which might well suggest upright looms; the late Lord Rennell of Rodd thought that the depressions in the corresponding stalagmites may have suggested to the poet kraters and amphorae.³ Alternatively, the cave may well have been a place where a cult was maintained and votive offerings were left.

If we concede that the poet had some personal acquaintance with Thiaki, it is difficult to exclude this cave from the sites he describes. That he places it, on any natural interpretation of his words, very close to the sea, whereas the original is at a little distance, cannot weigh seriously against the identification.⁴

On these remarkable coincidences between the actual terrain and the poet's account of it the case of the Ithakists must rest;⁵ the alleged continuity of nomenclature is a mere assumption, since in the case of two out of the four islands it does not exist.⁶

¹ * 503-5.

² * 96-112. See Baedeker's *Greece*, map facing p. 274.

³ *Homer's Ithaca*, pp. 152 ff.

⁴ Despite the pontifical pronouncement of Baedeker. Surely this is precisely the sort of minor adjustment which we might expect the poet to make. 'How the Torman rocks have crept so near to Earnaid' (R. L. Stevenson, *Kidnapped*, p. v) recalls how the creative artist may be expected to deal with such matters.

⁵ One site, however, has not been located. Despite much search the *εἰρηὶα νῆσος* of p. 205 by which Odysseus and Eumaios on their way to the house of Odysseus meet Melanthus still defies discovery. Provisionally we may suppose, despite the singularly detailed description, that the poet is indulging in a flight of fancy.

⁶ Owing to its unimportance, strategic, commercial, and economic, Ithake-Thiaki makes no appearance in Greek history; none of the great prose writers of the classical period mentions it. Poetic literature is all but equally barren. The *Hymn to Apollo* (428-9) follows the account of

If the poet possessed this detailed knowledge of Thiaki, he must have acquired it in one of two ways. Either he was an Ithakesian, a view which has been held in ancient and modern times but hardly calls for serious discussion, or he had visited Thiaki. It has been suggested above (p. 437) that the poet had personal knowledge of Attica; why, unless to display it, should he have defied epic convention and made Athena betake herself from Scherie not to Olympus but to Athens, where she dwells un-Homerically in the strong house of Erechtheus?¹ More than that, he knows that Athenian territory embraces Sounion,² and when he makes the goddess land at Marathon *en route* for Athens, he undoubtedly recognizes the Marathonian Tetrapolis, that most ancient territorial unit which maintained the cult of its tutelary deity, Athena Hellotis, in the fourth century, as an inscription shows, and probably much later.³ Since Athena makes no stay at Marathon, it looks as if the Tetrapolis also had been absorbed into the territory of Athens by the *συνουσιαμός*, as indeed we should expect to be the case in the second half of the eighth century. It is hardly more surprising that an Ionian poet should visit Athens than that Hesiod should visit Euboea; to many, perhaps most, Ionians Attica must have been *προσβυράτη γαῖα Ἰαυόνης*. It is equally natural that he should know Euboea and name Geraistos.⁴ Nor does his knowledge stop here; he knows that with a fair wind Diomedes may be expected to arrive at Argos from Lesbos on the fourth day⁵ and Cape Malea crops up repeatedly as a recognized danger-point in the coastline of Greece. None the less, many an Aegaeon ship rounded it, and it would be no unheard-of adventure for the poet after a stay in Athens to secure a passage in a Chalcidian ship bound for the Sicilian Naxos or for Leontini and land at Thiaki, which lies on or hard by the route which Greek shipping regularly followed to south Italy and Sicily by way of Corfu. Such a journey, whether made—why not?—for the very purpose of exploring the home of his hero or merely for the sake of adventure and enlarged experience, that he might know many cities and the minds of men, surely need not surprise us.⁶ The *basileis* were probably

Odysseus and gives an *ἄπορ αἰθέ* as the distinguishing mark of the island. In the extant works of the tragedians the name appears only in Euripides, who twice indicates it as that of the home of Odysseus (*Cycl.* 277, *Tro.* 277) without any geographical implications. Had the Odyssean plays of Sophocles survived (*Euryalus*, *Odysseus ἀκατοβολήε*, *Odysseus παιδομαστός*) some hint on contemporary identification of the islands might have been gleaned from them, since the scene is in each case laid in the home of the hero. As it is, our earliest extant authority for Ithake-Thiaki appears to be Artemidoros of Ephesus (fl. c. 100 B.C.), quoted by Porphyrios *de Andr. Nymph.* 4.

¹ γ 88-1.

² γ 278.

³ See v. Prott u. Ziehen, *Fasti Sacri*, no. 26 and cf. p. 53.

⁴ γ 174-8.

⁵ γ 180-1. For similar knowledge cf. I. 363.

⁶ He may not have been the first to explore the setting of his story in advance. It is surely no accident that leads Poseidon to select the top of Samothrace as the best point of vantage from which to command a view of Ida, of the ships of the Achaeans and of the city of Troy (N 11-14). Cf. Kinglake, *Eothen*, ch. iv. *sub fin.* It was Robert Wood (*Essay on the Original Genius of Homer*, pp. 133-5) who first pointed out that the whole intrigue of Hera and Poseidon against Zeus gains much in clarity if followed on the map. Those who have wandered as he

still maintaining their little courts, where an *aidos* from the great world would be a welcome guest. The ruler of Thiaki, an idle king among his barren crags, would have a golden opportunity to propagate the Ithakist legend which the inhabitants of Thiaki had doubtless maintained from the first; Leukas, under Corinthian sway and situated on a main route of commerce and colonization, had other things to do than dream of the past.

Though his reward may have been smaller, there is no reason to suppose the dangers and discomforts which the poet of the *Odyssey* would encounter greater than those incurred by Simonides, Aeschylus, and Pindar. If we attempt to reconstruct his journey from the data offered by the *Odyssey*, we note that there was nothing to tempt an Ionian ship up the Laconian Gulf to Gytheum, of which the poet makes no mention; Sparta's maritime relations in the late eighth and the seventh century were, so far as our scanty evidence serves, with Rhodes. Nor has he anything to tell us of Cythera, though his solitary reference to it shows him aware of its situation.¹

The Gulf of Messenia and the port of Pherai (Pharai) lying on the coastal margin of a peculiarly fertile plain may well have had greater attractions than Gytheum, and we note the poet's knowledge that Pherai lies roughly midway between Sparta and the classical Pylos, a day's journey from each.² Despite Strabo's opinion, there can be little doubt to-day that the site of Nestor's Pylos is in the immediate neighbourhood of that which bore the name in classical times, where the excavations of Kourouniotes and Blegen have laid bare the upper strata of a great Mycenaean palace and located a number of Mycenaean tombs.³ Here are data for the two days' journey of Telemachus from the seat of Nestor to that of Menelaos and back with a night's halt at Pherai on each occasion. Of course the idea that such a journey could be made by chariot is preposterous. Apart from those roads which radiated from Mycenae in her great period, we know of none covering such distances and capable of taking wheeled traffic either in the Bronze Age or at any date that can come into consideration here. Nor was the chariot, in which the charioteer and paraibates stood bolt upright in an

did on the Trojan plain will be inclined to echo his concluding remark that 'the original idea of Neptune and Juno's journey was most probably conceived in the neighbourhood of Troy'.

¹ i 81.

² See γ 478 ff. and π 182 ff. Frazer (*Pausanias's Description of Greece*, iii, p. 422) gives the distance from Sparta to Kalamata, which stands on the site of the ancient Pharai, as a long day's ride via the Langadha Pass, that from Kalamata to Pylos on Navarino Bay as 10 hours exclusive of stops. Baedeker gives the distance from Sparta to Kalamata via the Langadha as 11 hours; with the second half of the route he does not deal.

³ *AJA.* xliii (1930), pp. 557 ff. There was in antiquity a tradition of a third and vanished Pylos (Strabo, 339 and 350; cf. Aristoph. *Eq.* 1057, and Schol. ad loc.); Strabo located it in Triphylia and held it to be the city of Nestor. This view enjoyed some popularity in the first decade of the present century, chiefly as a result of the German excavations at Kakovatos under Mt. Kaiapha, where Dörpfeld opened three tholos tombs dating to c. 1500 and laid bare some remains of a Mycenaean palace (*AM.* xxxiii, 1908, pp. 295 ff.). At this time no Mycenaean remains from the Messenian Pylos were known, except a handful of sherds. Some years earlier V. Bérard (*Les Phéniciens et l'Odyssee*, p. 100 f.) had fixed on Samikon, whence, as he thought, a route *carrossable* could be traced to Sparta, as Nestor's Pylos.

extremely limited space, ever a vehicle of travel. Priam indeed makes the three-mile journey from Troy to the Greek camp in his chariot, but the distance, left undefined and known to be short, does not shock the imagination; and in any case the ruler of Troy must go on his supreme errand with regal dignity rather than Euripidean realism.¹

It was perhaps this heroic model which the poet of the *Odyssey* followed. In any case he was in a difficulty; the journey would undoubtedly have been made on mule-back (a horse would hardly have been risked on the torrent beds of the Langadha route), but the epic poet felt himself precluded from saying so. Riding, though recorded on vases before the end of the eighth century and known to the poet, was not permitted to the heroes themselves.² The journey of Telemachus may have fixed the heroic convention in this respect for the classic age; thus Laius sets out from Thebes for Delphi in a chariot. The alternative was to fall back on heroic simplicity and walk, like Oedipus and Jason.

To sum up—the poet's knowledge of the Peloponnese is just what might have been gleaned in the ports at which a westward-bound vessel might touch.

It is possible that he carried his travels beyond Thiaki. Pausanias thought that he visited Thesprotia and found there the river names which he gave to the waters of Hades;³ he may have visited the *νεκρομαρτεῖον* famous in later days, and if it was indeed situated, as Frazer suggests, where the Acheron emerges on the plain from one of the wildest and gloomiest gorges of Greece,⁴ the awe-inspiring scenery may have moved

¹ The same consideration applies to his visit in *I* 259 ff.

² It is noted in the Scholia on ϵ 371 and also in those on *O* 679 as not practised by the heroes; those on *K* 513 justify it in the case of Diomedes $\delta\alpha\alpha$ $\tau\eta\epsilon$ $\chi\alpha\rho\iota\mu$. The lapse accords with the lateness of the book; in the *Scrutator* (286) the convention is abandoned, though no individual hero is concerned. For representations in Geometric vase-painting see P. et C. vii, p. 227, figs. 99, 100. Early representations of riding in Greek art begin on the mainland in the Late Geometric age, but in Crete so much earlier as to suggest that the island, possibly under Near Eastern influence, followed a line of her own. The proto-Geometric vase which contained the ashes of the cremation deposited in the LM III tholos tomb at Moulana (*v. supra*, p. 154, fig. 10) has on the reverse a mounted warrior (*Eph. Arch.*, 1924, pl. 3). There is—or was—in the Museum at Herakleion another example from Kavousi, said to be sub-Mycenaean. Accurate dating is of course impossible, but these instances may be roughly contemporary with the eleventh-century reliefs from Tell Halaf, on one of which a mounted warrior is represented (von Oppenheim, *Tell Halaf*, Erg. ed., pl. xviii B). A Geometric sherd from Vrokastro (*Vrokastro*, p. 98, fig. 53 F) shows a mounted man with a round shield. Mainland examples at present known are from Attica and Boeotia, whither the knowledge may have spread from Ionia; see P. et C. vii, p. 227, figs. 99, 100; *Ath. Mitt.* xxviii (1903), p. 182, pl. iii, and *JHS*, xix (1899), pl. viii = *Muz.* 14 and 15; all four are non-military, the third may represent preparations for a race, the fourth part of a funeral procession. Finally, in the British Museum there is a Late Geometric steatite gem of poor workmanship, said to come from Amargos, on which is engraved the figure of a mounted man, possibly a warrior.

³ I. xvii. 5 Ὅπως δὲ μοι δοκεῖ ταῦτα διαπαιεῖς ἐς τὴν Ἰλλυρ ποταμὸν ἀπὸ τῶν ἐν Αἰθίᾳ καὶ δὴ καὶ τὰ ὀνόματα τοῖς ποταμοῖς ἀπὸ τῶν ἐν Θεσπρωτίᾳ θέσθαι. For a description of the scenery see Frazer, *ad loc.*, ii, p. 161.

⁴ On the site of the modern village of Glyky.

him to compose the lines in which Circe gives the hero directions for his formidable journey.¹ The Corinthians had not been long enough in Corcyra to spread the fame of the oracle abroad, though in Periander's day it must have been fairly well known. Ionians to whom the proper names would suggest a definite locality must have been few indeed, and its removal to the farther shore of Ocean would not seem incongruous.

Granted the poet's journey, the earliest probable date for it falls within the last third of the eighth century, which saw the opening of Greek colonization in the west. Our next task is to see how far any chronological data which the poem itself may afford agree with this hypothesis. This involves the assumption already made of single authorship, to which there is much less opposition than in the case of the *Iliad*, so striking is the structural unity of the exceedingly complicated plot. There is only one obstacle to its acceptance, viz. the duplication, as it appears to be, in ϵ of the divine assembly with which α opens; in what we may call the disintegrating age of Homeric criticism this was naturally taken to prove that the original or at least one of the earlier *Odysseys* began with ϵ and that the *Telemacheia* was the addition of a later poet, who had to legitimate it by the sanction of a divine assembly. What we have is in fact an example of the working of the rule discussed above which governs the treatment of simultaneous events in epic. Though first worked out in detail and applied to the *Iliad* by Zielinski, the general principle was stated in a couple of succinct half-pages by Monro in the same year² and used to explain the two divine assemblies; Zielinski, though he confined himself in the main to the *Iliad*, showed that it also accounted satisfactorily for Telemachus' month of inaction under the roof of Menelaos. In the assembly of α two courses of action are decided on. Athena is to go to Sparta and set Telemachus travelling in search of his father, and Hermes is to go to the island of Calypso and bid her let the hero go. The train of events which Athena sets in motion must be pursued to the end, a matter of nearly four books; and when the end is reached, the poet cannot say, 'We will now turn back to the departure of Hermes also decided on in the divine assembly with which we started.' Far from being an indication of the conflation of two distinct poems, the double assembly, conforming to a rule of epic composition, rather supports the hypothesis of unity of authorship.

The chronological indications which the poem supplies are a trifle less meagre than those afforded by the *Iliad*. The most important is to be found in the allusions to the Phoenicians, an historical people about whose movements in the western Mediterranean we have a certain amount of information. Though their appearances in the *Odyssey* are confined to the narratives of Odysseus and Eumaios, they are securely woven into the texture of the poem. As we have seen elsewhere, the earliest documented

¹ α 509-15.

² *Od.* xiii-xv, pp. 311 and 315; for Zielinski cf. *supra*, pp. 469, 479.

appearance of the Phoenicians in the west is in Sardinia, in the first half of the eighth century. There is no evidence that their ships had come even as far as the Aegæan at any earlier date, though they were probably known in Crete and possibly in Rhodes. By the middle of the century, however, there had been contact sufficiently close to bring about the adoption by the Greeks of the Phoenician alphabet, and about the same date the Greeks were sending ships as far east as Cyprus. In Cyprus the borrowing of the alphabet must have taken place.

In the west the Phoenicians must undoubtedly have prosecuted the adventure they had begun; the eclipse of the power of Assyria, which lasted from the accession of Shalmaneser IV in 782 to that of Tiglath Pileser III in 745 left them undistracted by dangers at home. It is presumably in this period that they effected that occupation of headlands and islets right round the Sicilian coast of which Thucydides tells.¹ That his statement has not so far been corroborated by archaeological exploration need not mean much; in Cyprus, where Kition at least was a Phoenician settlement, Phoenician objects are very few and, generally speaking, late.²

The middle third then of the eighth century is the period reflected in the picture of Phoenician activities given in the *Odyssey*, where we find Phoenicians busy, as we should expect, in the eastern Mediterranean, ranging from their own coast to Egypt and Libya and back to Cyprus; sailing also up the west coast of Greece and dropping on Ithaca a passenger whom they have failed to land on the coast of Messenia or Elis.³ This last occasion is the only one on which the poet has a tolerably good word to say for the Phoenicians, who are not yet contending for the control of Sicily. The Greeks have not yet crossed the Ionian Sea; if they know the name of Sikel,⁴ that is the extent of their knowledge. This of course in no way invalidates the hypothesis that the poet himself belonged to the succeeding generation; conscious that his tale is of a remote past, he might naturally reproduce the conditions prevalent in his father's day. Apart from the occasion just specified, there is in all references to the Phoenicians a certain intimacy of dislike which is better suited to the time of the struggle for the control of the Sicilian coast. That this is in fact the poet's own period is strongly suggested by a passage not concerned with the Phoenicians, that in which he describes the founding by Nausithoos of the Phaeacian colony on Scherie. The two lines involved (ζ 9-10) give the routine procedure in the founding of a Greek *apoikia*, with the wall which for the new type of coastal settlement⁵ was a first essential as a protection not only against the barbarians of the hinterland, but also against attack

¹ vi. 2. 6.

² It is a bare decade since a tomb inscription established the fact of Phoenician settlement in the 9th century. See p. 129, n. 1.

³ = 272 ff.

⁴ v 383. The other three references to them and the name of Sikanie occur in *iv*.

⁵ Thuc. I. 7. 1, a passage with which ζ 262 ff. agrees. The epithet *ἐκδορός* is applied to cities (Kerinthos on Euboea and Helos, the port of Laconia) only in the *Catalogue*.

by sea, the temples, daughter foundations of the chief shrines of the metropolis, like those which at a very slightly later date we can trace at Gela but whose existence in any Greek city epic consistently ignores,¹ and the division of the land among the original settlers.² It is difficult to see how this passage could have been composed before 735; probably it is appreciably later, when colonization had become a subject of general interest.

The comparative frequency with which ivory is mentioned³ indicates for the *Odyssey* a date rather later than that of the *Iliad* and not earlier than the last third of the eighth century, so far as we can judge from finds on the Greek mainland, and we have no reason to think that Ionia was more advanced in this respect. The use of the adjective *πυρρός* suggests what the evidence of finds on Greek sites proves, viz. that the Greeks as a rule imported the raw material and carved it themselves. The most significant of the objects mentioned in the *Odyssey* is the chair of state⁴ in the hall of Odysseus in which Penelope sits when she receives the unrecognized beggar. Furniture adorned with small inlaid panels of carved ivory was a regular product of Phoenician art or rather industry; some of it is probably to be dated to the ninth century, some certainly to the eighth, probably to the first half of it.⁵ Couches and, more immediately important to us, elaborate chairs with footstools, appear on Assyrian reliefs of the period. One such is represented on the Late Geometric bowl from the Dipylon already cited,⁶ but this does not of course necessarily imply direct knowledge of such furniture in the artist. Whether the poet speaks from such hearsay as might reach him from Cyprus or from actual knowledge we cannot tell. The chair dedicated by King Midas at Delphi may have been of this type and may have found its way to Greece before the end of the eighth century; Midas would have been in a better position to maintain relations with the Aegaeon before his subjugation by Sargon II in 709 cut him off from the Cilician coast.

¹ Besides the Greek technique employed in its foundation, the *polis* of the Phaeacians acknowledged the gods of Greece; one of her temples, and apparently the chief of them, was a Poseidon (5. 266).

² Appropriation of land is hardly conceivable unless the *despota* were in a barbarian land. Scherie is conceived of as a Greek settlement in alien territory.

³ 8. 73, 9. 404, 9. 106, 7. 56, 563, 564, 6. 7. The passage (9. 200) in which decoration in gold, silver, and ivory is ascribed to the primitive home-made bed of Odysseus can hardly be anything but an interpolation.

⁴ 7. 56.

⁵ See R. D. Barnett, *Irak*, ii, pp. 179 ff. The ivories of Arslan Tash (Thureau-Dangin and others, *Arslan Tash*) and of Samaria (Crowfoot, *PEFQ.*, 1932 and 1933, and *QDAP.* iii. 4, p. 179) are probably of the ninth century; these from the latter site may have belonged to the ivory house of Ahab.

⁶ *AM.* xviii (1891), p. 113. The footstool is not in this case made in one piece with the chair; in fact, it is generally separate. On a Phoenician bronze bowl from Olympia, however, a simple throne and footstool in one piece are represented (P. et C. iii, p. 583, fig. 550); the bowl is probably of the seventh century, but the throne *motif* may well be much older. A Cypriot vase has two thrones without footstools (P. et C. iii, p. 711, fig. 525); one is decorated with roundels, probably the method implied in the description of Penelope's throne.

There appears to be a reasonable case for putting the composition of the *Odyssey* not earlier than the last third or quarter of the eighth century. This conclusion will in turn affect our estimate of the date of the *Iliad*. There is no absolute test which enables us to say that it is earlier than the *Odyssey*; if there were, so many distinguished scholars could hardly have thought that all the best books of the *Iliad* were the work of the author of the *Odyssey*. The strength of a common epic convention in both poems and the close similarity of grammar and vocabulary justify the belief that they are very near together in date; but the severest linguistic tests do not avail to establish the priority of the *Iliad*. For instance, the slightly greater proportion in the *Odyssey* of instances in which the demonstrative \acute{o} , η , $\tau\acute{o}$ is used as the definite article may be due to the difference of subject which permitted a slightly more familiar treatment and a shade of approximation to the spoken language. It may, however, be urged that the poet of the *Odyssey* seems to have known the *Iliad* in a form which, if we leave Θ , I , and K out of account, is virtually complete. The general knowledge of the Tale of Troy which he possesses and presumes in his hearers might indeed be derived from the body of traditional poetry which, as is generally admitted, provided the poet of the *Iliad* with his theme, or from the *Menis* of Achilles, supposing it to have had an earlier and independent existence; but the part played by Helen in the *Odyssey* can only be due to the poet's knowledge of the Helen of the *Iliad*. Whatever his deeper intention may have been when he invested the rehabilitated wife, mother, and *châtelaine* with every adjunct of dignity and romance, there can be no doubt that ostensibly he carries on the tradition of the *Iliad*.

A minor point in favour of a slightly earlier date for the *Iliad* may be recorded, though not stressed. Ivory is mentioned only twice in the *Iliad*,¹ each time as the material of a horse-trapping, a form in which it was found at Nimrud.² As in the first passage it is one of the terms of a simile, we must take it that a horse-trapping was the most striking form in which it was known to the poet, as well as one which was likely to be exported earlier than a chair of state. Most important of all, however, is the fact that the conception of Odysseus in the *Iliad* is in no way affected by the presentment of the hero in the *Odyssey*; this would surely be possible only if his lineaments were already fixed when the poet of the *Odyssey* went to work.

To provide a *terminus ante quem* for the *Odyssey* is not an easy matter. If with Aristophanes of Byzantium and Aristarchus we abandon the latter part of ψ (297-end) and the whole of ω together with certain additions to the *Nekyia* indicated above—the Catalogue of Heroines, the Exemplary Sinners, Herakles or rather his eidolon—and the entire episode of the Shifting of the Arms, it does not appear that anything of importance in the *Odyssey* (with one exception to be discussed below) is necessarily later

¹ *J* 141, *E* 583.

² *Irak*, ii, p. 186, § 1, and pl. xxiv, 2, a rather elaborate form.

than the closing years of the eighth century. It is true that hoplite armour, which makes no appearance whatever in the *Odyssey*, has much less value as a chronological test than in the case of the *Iliad*. Martial equipment plays a very small part in the poem, regular warfare none at all; a seventh-century poet might well prefer to abide by stock phraseology in a matter of small moment. It is worth noting, however, that in two out of the three cases¹ in which the traditional equipment of helmet, shield, and a pair of throwing-spears is enumerated, the helmet is described as *πάγχαλκος*. This applies to the latest of the Geometric types, the immediate predecessor of the Corinthian helmet of the hoplite, and is therefore consistent with a date in the last part of the eighth century, but no earlier. The epithet does not occur in the *Iliad*.²

We have now to consider two concrete objects mentioned in the *Odyssey* which cannot have found a place there before the seventh century. The first is the lamp with which Athena lights Odysseus and Telemachus³ when they remove the arms from the megaron. It is not at first sight obvious on what grounds Athenaeus⁴ pronounced the lamp to be οὐ παλαιὸν εἶρημα. His evidence must have been drawn from literary sources alone, of which the earliest was Homer; and for his further statement that οἱ παλαιοὶ φλογὶ τῆς τε δαδὸς καὶ τῶν ἄλλων ξύλων ἐχρῶντο he seems to be indebted to a passage in the *Odyssey* separated by only about 150 lines from that in which the lamp of Athena is mentioned.⁵ It cannot be that he doubted the authenticity of the episode of the arms. The passage in π in which their removal is foreshadowed was indeed suspect in antiquity and was athetized by Zenodotus, but no doubt seems to have been felt about the actual shifting. The scholia explain the lamp alternatively as a torch or as a light emanating from Athena herself, the particle ὥς being omitted, and one of these solutions may have commended itself to Athenaeus. If lamps could be shown to have been in use in the eighth century, the mention of one here might have been defended on the ground that it is the property of a goddess, but this is not the case. The period between the end of the Bronze Age and the seventh century was in this sense at least a dark age and so appears in Homer. The heroes either depend on fire-light, as in the hut of Achilles⁶ and, more surprisingly, in the palace of Alkinoos⁷ where Arete sits spinning ἐν πυρὸς αὐγῇ, or on braziers (λαμπτήρες) constantly replenished with fuel which must include pinewood, to ensure a good flame;⁸ when a portable light was wanted, torches were used.

To these literary data corresponds the fact that whereas the lamp is a frequent object in Mycenaean chamber-tombs and reappears in seventh-century contexts, no single specimen has been found which can be dated to the intervening period. The chamber-tombs of course inform us only

¹ α 256, π 377-8, χ 101-2.

² γ 34.

³ ι 206.

⁴ χάλκεος, however, does.

⁵ γ 100, *sub fin.*

⁶ ζ 305.

⁷ σ 307 ff.

⁸ π 307 ff.

about the lives of the well-to-do; the lamps in them are sometimes of terra-cotta, sometimes of steatite, but even in the former case are of a good size and well made.¹ As they do not occur in the Shaft-graves² nor on the mainland at any earlier date, it is a fair inference that they were introduced from Crete in LH II. Not till the seventh century does the lamp reappear.³ It is now of a new material—marble—and semicircular or circular in shape, pierced for suspension, but flat-bottomed and therefore capable of standing without support. The workmanship is Greek, the marble is island marble from the Aegæan; probably all the known examples were produced in a single centre. The quantity is considerable, those of the semicircular shape numbering ten, those of the circular nine, and the distribution is wide, extending from East Greece to Sicily. Delphi has yielded one example, the Acropolis of Athens two, besides the fragments of three others.⁴ The exact provenance of the majority is known; of these two were found in tombs, the rest in sanctuaries. The series runs from the last decades of the seventh century to a date about the middle of the sixth, possibly a little later. If, therefore, the two passages which deal with the Shifting of the Arms form an integral part of the *Odyssey*, the poem cannot have assumed the form designed for it by the author until near the end of the seventh century and may not have done so till a couple of generations later. In fact the announcement of the scheme in the earlier of the two passages (π 281-98) is generally condemned; we may therefore confine our attention to the second (τ 1-50).

The grounds for its rejection, of which the principal is its inconsistency with the subsequent narrative, have been fully expounded by Monro in his commentary and will convince most readers; here it is only necessary to draw attention to the terms of the allusion to iron (αὐτὸς γὰρ ἐφέλκεται ἄνδρα σιδήρεος) as an unexampled breach of epic convention. In the *Odyssey* as in the *Iliad* the word for an unspecified weapon is χαλκός,⁵ and σιδήρεος, though it occurs frequently, has no martial connotation. The three partial exceptions to the rule which the *Iliad* affords (*v. supra*, pp. 119-20) by no means provide a parallel.

A convincing reason for the interpolation was found by Kirchhoff in the fact that the lines χ 140-1 were generally misunderstood. Melanthios was

¹ See Tsountas and Macartt, pp. 78-80; Wace, *Ch.T.*, pp. 136, 142, and pl. xxxvi; *P. of M.* i, p. 167, fig. 118 a, no. 12.

² See Karo, *Schachtgr.*, p. 227.

³ See J. D. Beazley, 'A Marble Lamp', *JHS.* lx (1940), pp. 22 ff., an article to which I am indebted for all the facts cited in the text. The terra-cotta lamps of early date excavated by the Americans at Corinth (*Corinth*, vol. iv, pt. ii) and in the Athenian Agora (*Hesperia*, ii, pp. 195 ff.) do not come into the question; some are dedications, but all are cheap household ware. The Corinthian series begins in the first half of the sixth century, the Athenian a little later.

⁴ Payne and Young, *Archaic Marble Sculpture from the Acropolis*, pl. 17, 1 and 2, and p. 67.

⁵ E.g. λ 122, τ 522, ε 315 and throughout the fight with the Suitors. Passages which describe events at Troy or normal fighting elsewhere are not quoted, as in these the tradition of the *Iliad* might be expected to prevail.

taken to mean 'I will fetch arms from the thalamos, for they are there, in the place to which Odysseus and his son removed them', but what he really said was 'they are in their proper place' (i.e. the thalamos), 'and Odysseus and his son have not put them anywhere else'. Kirchhoff, though he condemned the second passage, accepted that in π , but Monro's suggestion that the misunderstanding generated the entire episode of the arms and that both passages must go commands assent.

The next problem is the approximate dating of their insertion. For the introduction of Athena's lamp, which cannot be removed without injury to the context, there must have been a motive. We have found the marble lamp to be a novelty of the late seventh century which enjoyed a considerable vogue for some sixty or seventy years and was chiefly used in the service of the gods. Of the five lamps found on the Acropolis of Athens some at least must have been dedicated to Athena; though for a golden lamp she had to await Callimachus, it seems probable that his creation, the *ἀοβέστος λύχνος* which Pausanias saw burning before the ancient image of Athena, was the last in a series of at least three. One must have perished in 480 and been replaced by another which was ultimately superseded by that of Callimachus; it seems not unlikely that τ 34 commemorates the first and that both the interpolated passages together with ω 162-6 are of Athenian origin. The failure to see that the narrative was complete as it stood would be natural enough in Athenians of the Peisistratean age poring over an Ionian text and planning the production of the poem by public recitation. At all events, the speculation is permissible.

The second object with which we are concerned is the brooch or rather clasp which fastened the cloak of Odysseus when on his way to Troy.¹ It has no known counterpart in actual life, and in that the account of it differs, so far as we can judge, from typical Homeric descriptions of dress or equipment. There can be little doubt that the first part of the description is based on a highly elaborate type of clasp peculiar to Etruscan art and dating to the first half of the seventh century. It is not a fibula nor even, properly speaking, a brooch.² Structurally considered, it consists of two sets of parallel tubes mounted on plates which must have been sewn to the opposite edges of the garment at the points at which they were to be united, and of two pins projecting from the outermost tubes of one half and adjusted to slide for about half their length into the opposing tubes on the other. The essential fastening is provided by a hook and eye or a pair of them attached to small plates between the pins on one side and the corresponding tubes on the other. By way of decoration each half supports one or more rows of sphinxes or similar monsters in the round, all alike and, in Etruscan fashion, all completely lifeless. What makes

¹ = 226-31.

² *HE*,² pp. 277-8, fig. 99; *JHS*, xxxi, p. 263, fig. 1; *B.M. Cat. Jewellery*, n. 1370, pl. xvii; *Curtis, Memoirs of the American Academy*, iii, p. 29, pl. 9.

certain the identification of the clasp of Odysseus with this type of fastener—so far, that is, as structure is concerned—is the mention of the twin auloi. An aulos is a hollow tube; its only other meanings in Homer are that of 'pipe' or 'flute' and, once, 'socket of a spear-head'.¹ Studniczka's suggestion that it could mean 'pin' cannot be entertained,² ingeniously though it is supported. If it is asked why the auloi and not the pins are mentioned, the most obvious answer is that the only word for 'pin' is *περόνη*, and that that has just been used in its generic sense covering every fastener which involves a pin, to denote the entire ornament.³ Further, a double pin, roughly of the shape of a hair-pin, which originated in central Europe, made its way into Greece in the seventh century;⁴ it has no sheaths, and therefore, quite apart from the fibulae of various types which have double pins, the mention of two would not be enough to identify the ornament.

The earliest datable example of the Etruscan clasp⁵ is that found in the Barberini tomb, the date of deposition in which is c. 680. As it is a solid piece of jewellery, not a simulacrum made for the grave, it is not unreasonable to put its date of manufacture rather earlier, say 690. It may be noted in passing that the vogue of the clasp is extremely brief, confined to the first half of the seventh century, and that the date of the interpola-

¹ P 297; cf. v 356. It is also once used figuratively of the jet of blood which issues from the nostrils of a man who has been shot through the throat with an arrow (x 28).

² Ap. Bêthé, *Heimer, Dichtung u. Sage*, ii², p. 147*. By those who suppose the clasp of Odysseus to be some form of fibula the auloi are supposed to be the catches for the pins. This is the meaning commonly given to *αὐλίδες* of α 293, but there can be little doubt that Jacobsthal is right in regarding these as the backs or bows of the fibulae, which unite spring and catch as the thwart of a ship unites the two sides. *ἀσπερία* means virtually 'made out of'; cf. *ἀσπεργ*, II 212.

³ *περόνη*, which occurs once (L 491), can at this date only mean 'fibula'. Cf. *supra*, pp. 401-4 and 405. Manufactured by Hephaistos exclusively for his Nereid hostesses, though they do not represent a novelty in usage, they give the poet an excuse for admitting a word not elsewhere found in epic vocabulary.

⁴ Specimens of these pins have been found on sites in Bavaria, at Peschiera, and at Glött and Trebenitz. In Greece they have occurred at Aglion (Payne, *NC.*, p. 216, fig. 98 bis; this example is now in the Ashmolean Museum, Oxford); at Bassai (*Eph. Arch.*, 1910, p. 326, fig. 50; at Sparta (lead votives; *AO.*, pls. clxxx, 24; clxxxvi, 4; cxclv, 30-2); and on Delos (*Delos*, xviii, p. 276, fig. 313). It is possible that two double pins from the Artemision at Ephesus (*Exc. at Eph.*, pl. iv, 29) are of this type and not, as Hogarth thought, the double pin of the 'displayed hawk' brooch detached from the hawk; the point cannot be determined on the evidence of the reproduction. No other example is known from Anatolia. All datable examples known at present belong to the seventh or sixth century; a *δελφικός περόνη*, however, is one of the articles (petasos, chlamys, and sundry others) dedicated to Hermes in an epigram by Theodorus, who flourished c. 300 B.C. or a little later (*Anth. Pal.* vii 282). I owe these references to the kindness of Dr. Jacobsthal. The displayed hawk brooch, known from a few examples found in the Basin at the Artemision, seems always to have had a double pin, which, however, would have been invisible when the brooch was in wear and is therefore not likely to have been used to clinch an identification. The same is true of the small number of disk brooches with double pin collected by Blinkenberg in his Class XV (*Les Fibuliers*). An exceedingly small number of fibulae or, more strictly speaking, brooches with double pin will be found in his Class XII.

⁵ Incidentally, the clasp may be ultimately derived from the central European double pin, elaborated to suit the sophisticated dress of the Etruscans.

tion, if interpolation it be, is therefore correspondingly early. Further, only some half-dozen examples are known, all of gold or silver; clearly it is not an object with which even Greeks carrying on trade with the west can ever have been familiar. Poet or interpolator therefore had a free hand in combining his disparate elements. Trade between the Etruscans and Greeks, especially those of east Greece, is guaranteed by the occurrence of Etruscan bucchero on a number of Greek sites—Perachora, Rhodes, Samos, Naxos, Rheneia—there is even a sherd, overlooked by Graef, from the Acropolis of Athens. This trade begins in the seventh century.¹ The transportation of comparatively worthless pottery suggests that trade was fairly brisk and interchanges frequent; it seems probable that iron from Elba, whose mines were now being worked, was a major Greek import. Cumae, a joint foundation of the Aeolians, Chalcidians, and Eretrians, would be a natural depot.² It may have been here that some Greek saw the rare ornament. In the clasp then we have the basis of one half of the description. The fact that the small Etruscan beasts and monsters associated with it are in the round creates a certain presumption that the author imagined his dog and fawn as also in the round or very high relief, though this is not of course a necessary conclusion. The late Sir Arthur Evans thought that the description was derived by way of poetic tradition from a Minoan *motif* the knowledge of which we owe to a couple of engraved gems from Crete dating the one to the MM period, the other at latest to LM I b. There is nothing inherently impossible in this hypothesis, for, as we have seen, the description of the Boar's tusk helmet must have been transmitted in this way, but the extreme rarity of the subject is against it; no parallels to Evans's gems appear to be forthcoming at any later date in the Bronze Age.³ On the other hand, we have in the seventh century a school of very lively animal sculpture on a miniature scale, exemplified in a group of ivories from the Orthia site at Sparta. They belong to the latter half of the seventh century,⁴ but the school goes much farther back, as is shown by a Late Geometric bronze group of a man and dog attacking a lion.⁵ Coming as it does from Samos, this group suggests that the school

¹ The Perachora material is at present unpublished; for other references see Jacobsthal, *Préhistoire*, II, pp. 45 ff.

² Ps-Skym. 238; Strabo, 243; Dion. Hal. vii. 5; possibly by this date held exclusively by the Chalcidians. See *BSA*, xxxiii, p. 207, n. 1. The friendly relations of Corinth and Chalcis may be remembered in this connexion; not only is there bucchero at Perachora, but iron, rare in the Geometric deposit of the temple of Hera Akraia, is fairly abundant in the precinct of that of Hera Limenia, where a considerable quantity can be dated to the century 750-650 (*Perachora*, pp. 75 and 187-96). Cumae is stated by Strabo (i.e., Ephorus) to be the earliest of the Greek foundations in the West; the statement has been questioned, but is supported by the very considerable number of proto-Corinthian aryballoi of the earliest type found on the site.

³ See *P. of M.* iv, p. 524. The hunting-dog does of course occur, e.g. in the Boar-hunt fresco from Tiryns and on a couple of LH III sherds from Mycenae (F. and L., p. xxxix, nos. 410 and 411); on the second the dog is shown in pursuit of a hare.

⁴ *AO.*, p. 233.

⁵ *AA.*, 1939, p. 126, fig. 27; Pampe, pl. 30, 3 b.

originated on the east side of the Aegæan and its products would be familiar to the Ionians. Most of the seventeen Spartan ivories represent the lion devouring his prey, which is generally a calf. In one example the carnivore is a dog; his quarry has lost its head, but appears to be beyond all reasonable doubt a calf.¹ The resemblance to the clasp of *Odysseus* is nevertheless fairly close. It seems more likely that our author's fancy was caught by a contemporary work of art than that a motif so rare in Bronze Age art should have found its way into the tradition of heroic poetry. Whichever view we take, the combination of two unrelated elements to form an imaginary artistic product is unique in Homer.² τ 228-31 can indeed be removed without affecting the grammatical construction; this leaves us with a very fair description of the Etruscan clasp, but (since it lacks the lions or sphinxes) one hardly detailed or emphatic enough for the object which is to clinch the identification of *Odysseus*. Moreover, as only an infinitesimally small number of Greeks (of whom the poet appears to be one) can ever have seen the object, it would convey little to an audience, nor are there any grounds for thinking the second part of the description later than the first beyond the fact that it is incongruous with it. It may have displaced an account of the uninteresting little monsters proper to the clasp, but the original of the substitute is not necessarily any later.³ We must suppose the whole passage either to be original—in which case we must bring down the composition of the *Odyssey* as far as the second decade of the seventh century, though not necessarily later—or to be an interpolation, in which case it must have displaced an earlier description of a more Homeric *περόνη*. Such an interpolation may be dated anywhere in the first half of the seventh century, but, owing to the short life and limited range of the Etruscan clasp, which must at once have passed out of Greek knowledge, not later. It is worth remark that the only one of the small number known which was not found in Etruria comes from Cumae.⁴

¹ *AO.*, pl. ciii, 1.

² Apparent exceptions resolve themselves into an original text on to which an interpolation has been grafted. Thus we have only to remove from Agamemnon's shield the self-betraying seventh-century Gorgoneion; the associated figures of *Daimos* and *Phobos* perform accompany it, the text is restored to sanity and we are left with a known type of shield which has a central omphalos surrounded by concentric circles. Similarly the fantastic version of Athena's armour in *E* 738 ff. can be very simply got rid of on comparison with the parallel passage in *Θ*.

³ The passage contains one linguistic peculiarity, viz. the word *λαί*, now accepted in many quarters (e.g. in the new edition of Liddell and Scott) as a part of an otherwise unknown verb meaning 'to grip'. It can hardly have belonged to the traditional epic vocabulary; it may be an import from the vernacular, possibly of Anatolian origin. Nor does the description entirely conform to the tradition of the *ἄεθρος* as we find it in the *Iliad*, most notably of course in the account of the shield of Achilles, where we have the expert and impersonal appreciation of the connoisseur; rather it approximates to the note of personal emotion so marked in the account of the Belt of Herakles given in *λ* 609-14, a passage which forms part of an undoubted interpolation. This, however, is no proof that it is not by the poet of the *Odyssey*.

⁴ The following are the specimens known: from the Barberini tomb, Praeneste, one; *Memoirs of the American Academy*, v, p. 15, pl. ii, 5-7; from the Bernardini, also at Praeneste, two;

Certain fibulae have been proposed as affording an example for the *τεπὸρ* of Odysseus,¹ but the Spartan ivories offer a much better parallel. Each half of the clasp affords a field resembling the plinth of a miniature group; the entire subject, however, must be confined to one of them, since the animals are locked in a close struggle and the halves are necessarily separated by a distance equal to about half the length of the pins.

Regarding the passage as original we may take c. 680 as the *terminus ante quem* for the composition of the *Odyssey*.²

That the *Odyssey* contains traditional elements has been noted; and it is probable that just as the *Iliad* appears to have been built on a shorter and simpler *Menis* of Achilles, so the *Odyssey* had a direct and immediate ancestor in a poem which contained besides the return of the hero some account of his wanderings, his arrival in the land of the Phaeacians, and his transportation by them to Ithaca. This episode is guaranteed traditional by the petrification of the ship in which he is carried³ and by the atmosphere of magic which envelops these mysterious seafarers. Outside the Apologoi the poet of the *Odyssey* prefers to eliminate elements of the *märchen* type; for instance, Penelope's device of the web undoubtedly formed part of the tradition, but in the *Odyssey* it has become obsolete some time before the

op. cit. iii, p. 29, pl. 9. (From the position of the clasps found in the Bernardini tomb it was possible to infer that their use was to fasten a cloak on the shoulder.) Of two specimens in the British Museum one was said to come from the Roman Campagna, but is in fact of unknown provenance; the other is from Caere. *B.M. Cat. Jewellery*, nos. 1370 and 1371, pl. xvii; *JHS.* xxxi (1911), p. 263, fig. 1. One from Marsiliana is cited by Milani, *Mus. Top. dell' Etruria*, p. 161, no. 134. The last specimen in precious metal is from Cumae (*Mon. Ant.* xiii (1903), col. 232, fig. 10). Two bronze examples of considerably simpler structure are known, one from Saturnia (*Not. d. Sc.*, 1899, p. 482), the other from Vetulonia (*ibid.*, 1900, p. 489, fig. 29). The example from Cumae was found in a Greek cist-grave which contained a cremation and an exceptionally rich equipment, including besides the clasp several fibulae of gold and a shield of the type with cylindrical omphalos.

¹ The following classes of fibulae have been considered in this connexion by various scholars, but none of the Greek examples is earlier than the seventh century and their subjects are more remote than those of the ivory carvings. They are as follows: (1) The Boeotian fibula with engraved catch-plate; for the most plausible example see Hampe, pl. 8, no. 135; subject, man and dog attacking deer. This type occurs in gold (the Elgin fibulae, Hampe, pl. 7), and outside Boeotia, but none is known from Ionia. (2) A type of which 13 examples are known, all from the Peloponnese. The bow is formed by a lion couchant whose tail ends in a snake's head; *Fibules*, pp. 280-1. A stereotyped form of this sort is obviously inappropriate. (3) A unique fibula of unknown provenance, bought in Smyrna (*Fibules*, p. 104, fig. 114). On the back of the bow two small lions are confronted; from the middle a lion's or possibly a dog's protome and a human head project laterally, one on each side. For the most recent discussion of the clasp of Odysseus see Studniczka ap. Bethe, *Homer, Dichtung u. Sage*, ii², pp. 145*-5*. It is hardly necessary to mention a class found principally in Italy and Sicily and also at Hallstatt, the bow of which is formed by the body of a single animal. *Fibules*, pp. 43-4; *Not. Sc.*, 1895, p. 175, fig. 73.

² Owing to the fact that the only other description in the *Odyssey* of a certainly seventh-century object (the lamp) occurs in what may fairly be called a demonstrable interpolation and to the abnormal features of the *τεπὸρ* of the brooch there is much to be said for the opinion that the clasp of Odysseus is an interpolation, and that the composition of the *Odyssey*, though little if at all earlier than 700, should not be brought lower.

³ *ibid.* 567-71, * 146-83.

action opens. The Phaeacian episode, then, is traditional, but our poet is surely responsible for the portraits of the royal family of Scherie and their highly civilized court.

One of his main preoccupations is to put on record the events of the siege of Troy after the death of Hector and the fates of the principal Greek heroes, as though he were aware that the age of heroic poetry on the grand scale was drawing to a close and that what was not told now might be lost for ever. He attains his end by means of ingeniously varied devices. The crime of Aigisthos and the vengeance on him of Orestes are told by Zeus in a brief and allusive form in the divine assembly in α;¹ in γ Athena in the guise of Mentor assumes that the tale is known to Telemachus, adding the further detail that Clytaemnestra was implicated in the plot against her husband.² A little farther on Nestor, also assuming that his young guest knows the main outlines of the story, tells of Clytaemnestra's long resistance to her lover and ascribes her final surrender to *μοῖρα θεῶν*.³ There is some difference of opinion on the question which of the pair is thus partially exonerated, and some apply the ambiguous *μὲν* to Aigisthos; if, however, the clause is considered not in isolation but in relation to the preceding sentence, the meaning is plain. Of the murder itself Nestor tells nothing; on this, the supreme tragedy of the Nostoi, suspense is to be maintained. The deaths of Achilles, the Greater Aias, Patroklos, and Nestor's own son Antilochos are briefly recounted.⁴ These we shall meet again in the house of Hades; Nestor tells only the bare fact of their deaths. Though in consequence of the quarrel between the Atreidae Menelaos voyaged in his company as far as Sounion,⁵ he does not mention Helen.

Telemachus next proceeds to the court of Menelaos, who before he knows the identity of his visitor deprecates the latter's praise of his sumptuous surroundings and in a tone of bitter disillusionment declares how little they mean to him in comparison with the loss of the brother who in the hour of his return had perished by the wickedness of his wife.⁶ It is a curious fact that nowhere in Homer is there any indication that Clytaemnestra was Helen's sister. In the *Iliad* as well as the *Odyssey* Helen is described as *Διὸς ἐκγεγαυῖα*⁷ and in the *Teichoskopia* she describes Kastor and Polydeukes as her brothers (*ἀδελφοὺς αὐτῆς*), though without naming either parent, and claiming only a common mother.⁸ Only in the spurious ω is Clytaemnestra said to be the daughter of Tyndareos.⁹ It is not therefore unnatural that Menelaos in this speech makes no mention of Helen, yet his silence implies that he had found no consolation in her return to him; he speaks only of his wealth. His original property had been wholly wasted during his absence, but he does not speak of what she and Paris had

¹ α 26-43.

² γ 235.

³ γ 262.

⁴ γ 100-11.

⁵ γ 278.

⁶ δ 78 ff.

⁷ Γ 199, 418, δ 184, and in φ 218, a passage of doubtful authenticity; cf. *μοῖρα* Διός, Γ 426.

⁸ Γ 237-8.

⁹ 199; cf. Robert, *Die gr. Heldensage*, iii, 2, pp. 1021-2.

carried off with them, though allusions in the *Iliad* show that the amount was not negligible.¹ He would rather be living on a third of what he then had² and have the men who fell before Troy alive again. Of all his lost comrades there is none whose absence he deploras as he does that of the still-missing Odysseus. On this Telemachus breaks down and weeps, and Menelaos hesitates whether to question him or leave him to name his father of his own accord. Commentators incline to take this as a mark of the slowness in decision supposed to be characteristic of him, and it may be so; he no doubt displays the quality in ο (169-70) when Helen takes the interpretation of the omen out of his mouth. It seems possible, however, to interpret his silence here as proof of a sensitiveness and delicacy with which the creator of Nausicaa was quite capable of endowing him. At this point Helen makes her regal entry and promptly identifies the visitor, with a conventional introduction of herself as the cause of the Trojan War, in terms, however (*ἐμείοι κυρώτιδος εἶνεκα*), which are milder than those she uses when speaking to Hector in Ζ. The feelings of all are deeply stirred and they burst into lamentation, including Nestor's son Peisistratos, whose thoughts have turned to his own brother Antilochos, slain before Troy by Memnon, son of the Dawn. It is he, however, who with a deferential courtesy characteristic of the high manners of the *Odyssey* recalls Menelaos to the business which has brought Telemachus to his house. Menelaos promises a full discussion on the next day; meantime let them sup. After the meal, which is disposed of in three lines, Helen bethinks her of her Egyptian drug, and the emotional tension is relaxed. Now ensue two of our poet's strangest selections from the Trojan cycle. True, it is not unnatural that in addressing the son of Odysseus Helen should advert to the help which she gave his father when he entered Troy as a spy, in the disguise of a beggar. Her treachery would not lower her in the eyes of a Greek, especially as she describes it as due to a whole-hearted repentance.³

The tale, however, seems to have been a poor one or else to have suffered greatly in the process of epitomization; how Helen helped Odysseus by divesting him of his disguise remains unexplained. Taken by itself the anecdote might pass; the poet might have meant to indicate his belief that by her remorse and her desire to return to Menelaos scores were cleared and she was entitled to reinstatement. Menelaos, however, caps the tale with another and later one. When the Greek heroes were concealed in the Wooden Horse within the walls of Troy, awaiting the moment to emerge, Helen accompanied by Deiphobos prowled round the ambush, trying to surprise the Greeks into a premature disclosure of their presence by imitating the voices of their wives and calling on them by name. Not only

¹ *H* 363-4, *X* 114-17.

² This seems the more natural interpretation of 97; some, however, take the meaning to be 'of what I now have'.

³ § 255-64.

is the tale puerile; it is utterly destructive of the picture of Helen suggested by herself. Presumably, as Menelaos suggests charitably—or is it with irony?—she acted under the instigation of a daimon.¹

There is nothing haphazard in the selection and juxtaposition of these tales; they are the poet's sardonic comment on a figure of tragic romance and the earliest application to epic conduct of the ethical standards of everyday life. He does not labour his point. Helen is not present at the colloquy of Menelaos and Telemachus on the following day; she receives, however, a somewhat incongruous mention or rather allusion from Proteus in the prophecy with which he terminates his revelations to Menelaos. It is as son-in-law of Zeus that Menelaos is to have his place in that very limited Paradise where according to Hesiod² some heroes of the Theban and Trojan wars enjoy life everlasting. Helen makes her final appearance in the leave-taking with the same kind of *panache* as marked her entry. Her prompt dealing with the oracle has already been noticed. She gives Telemachus as a parting gift a robe of her own handiwork to be a present for his bride and a memorial of herself,³ but she casts no spell; Telemachus when recounting his travels to Penelope does not mention the gift, but refers to her merely as the woman who brought much suffering on Greeks and Trojans alike.⁴ This aspect of her is not wholly suppressed in the *Iliad*; Achilles calls her *ῥυέδανή Ἑλένη*,⁵ the only definitely hostile judgement passed on her in that poem and in the *Odyssey* paralleled only by the curse of Eumaios, who would have her whole race rooted out.⁶ Hero and swineherd both speak under the stress of strong personal emotion; how we are to take the verdict of Odysseus when in the house of Hades he responds to Agamemnon's tale of his murder is less clear. He couples Helen with Clytemnestra and by implication makes her equally responsible for the fall of the house of Atreus.⁷ Whether this is to be taken as the poet's final judgement or as a partial statement appropriate in the mouth of Odysseus depends on the view taken of the seven lines in ϕ athetized by Aristarchus,⁸ and it is unlikely that on this point agreement will be reached. It is difficult, however, and many will find it impossible to resist the conclusion that they are an interpolation, an irrelevant interruption of Penelope's clear and logical train of thought.⁹ If genuine, they are possibly to be regarded as a sort of palinode, a gesture by the poet to the face that launched a thousand ships; despite his ironic judgement of her in her final haven of security and prosperity, he does not wish her to dwindle quite below epic stature. It might perhaps also be argued that besides the crude and obvious contrast between Penelope and Clytemnestra with which we are several times confronted there is one subtler

¹ δ 274-5.² *Op.* 156 ff.³ σ 123 ff.⁴ ρ 218.⁵ τ 325.⁶ ξ 68.⁷ λ 436-9.⁸ 218-24.

⁹ The lines are rejected by Wilamowitz (*Homericische Untersuchungen*, p. 84, n. 1), Blass (*Interpolationen in der Odyssee*, p. 212), and Mouro in his commentary, *ad loc.*, to name only a few recent scholars.

and never made explicit between Penelope and Helen and that here, though Helen is not condemned, the *beau rôle* is Penelope's. So much for Helen; the magic of the *Iliad* has departed, and we share the disillusionment of Menelaos.

The Nostos of Menelaos presents some peculiar features. In the speech which he addresses to the still unknown Telemachus¹ he briefly indicates the range of his wanderings; they are of the kind recounted by Odysseus in Ithaca, non-miraculous and laid in real though but vaguely known localities. Though the fairy-tale element in the narrative links it in some degree with the Apologoi, Proteus is a Greek divinity² and Menelaos meets him in the real world. Though the information which he at last gives about Odysseus³ is the ostensible reason for the introduction of Poseidon's seal-herd, he does much more than this, more even than provide one of the most enchanting fairy-tales in literature. The fate of the Lesser Aias, the only other Greek leader of importance still unaccounted for, is told with a reference to his offence against Athena;⁴ Cassandra is not named, but the hearers' thoughts are inevitably turned to her. Then follows the first full account of the homecoming of Agamemnon and his murder at the treacherous feast to which Aigisthos invites him.⁵ There is no mention of Clytaemnestra or Cassandra, and for this reason the tale has sometimes been said to be inconsistent with that in the *Nekyia* given by the shade of the king to Odysseus; but the criticism is unjust. In the previous mentions of Agamemnon's end curiosity has been aroused and suspense created; now the narrative hitherto withheld is unfolded just so far as is necessary to prepare us for the scene in Hades, for which the climax of horror, the direct participation of his wife, must be reserved to be told by the murdered man himself. With his fate that of Cassandra is bound up. There is no discrepancy here, but a masterly economy of disclosure. Further, Proteus as narrator amplifies and enlivens the story of the plot by revealing its origin and progress, which could not be known to Agamemnon or to anyone but the criminals. The tidings of Odysseus marooned on Kalypso's island follow, and the story is admirably wound up by the prophecy of ultimate bliss for Menelaos.

Before leaving the tale of his fortunes we may note that he nowhere speaks of Helen as being in his company on his travels, though in the preceding narrative she is explicitly said to have stayed with him at Thebes in the house of Polybos and Alkandre and by implication in that

¹ § 83 ff.

² See Roscher, *Lex. Myth.*, s.v., and Robert-Preller, i, *Theogonie*, pp. 609-10. Late authorities, probably following a good tradition, give him a home on the shores of the Chalcidic peninsula. The power of self-transformation common to so many water-spirits is also possessed by Thetis, an admittedly Greek figure, though naturally she does not exercise it in the *Iliad*; she was represented, however, on the chest of Cypselus, making use of it to escape from Peleus (Paus. v. 18, 5b).

³ § 555 ff.

⁴ *Ibid.* 512 ff.

* *Ibid.* 499 ff.

of Thon and Polydamna as well.¹ Plainly in the Proteus story the poet is utilizing a folk-tale which had no original connexion with Menelaos; possibly the failure to relate Helen to his travels may have given a hint for the tale according to which she spent the time of the war in Egypt, whence Menelaos ultimately brought her back, and only an *εἰδωλον* went to Troy. The two reported lays of Demodokos (θ 73-82 and especially 499-520 with its introduction by Odysseus 487-98) focus the attention of the Phaeacians on Odysseus himself, his prominent position in the Greek host and his commanding personal qualities, leading up to his self-revelation at the beginning of the next book. The tale of the Wooden Horse is also told.

The theme of 'the men who fought at Troy' is resumed by the poet in the *Nekyia*. That he incorporates an older element, viz. the calling up of Teiresias, with another which affords a view, if nothing more, of the heroes walking in the meads of asphodel is generally admitted, and this involves him in some irreconcilable inconsistencies. The raising of Teiresias is closely woven into the fabric of the Apologoi, in which it forms one of the most notable adventures; it is linked on the one hand with Circe who enjoins it and on the other with the cattle of the Sun which the dead seer warns Odysseus to respect.² It certainly formed part of the tradition taken over by the poet and is handled with skill and impressiveness. For the heroes of the *Iliad*, however, he needed means less primitive than the necromancy of Endor and a stage more spacious than the cubit-square pit from which the insubstantial shades emerge,³ and from Circe's first announcement of the grim journey we have been prepared at the cost of certain inconsistencies for a Descent into Hell. Thus Circe bids him visit *Αἴδαιο δόμους*, Antikleia, who has herself risen from the pit, asks him how he has descended *ὑπὸ ζόφον ἡρόεντα*, Circe greets him and his company on their return as men who *ζῶοντες ὑπέρλαβετε δῶμ'* *Αἴδαιο*⁴ and most explicitly of all, Achilles addresses him in terms of awe.⁵

Just how far the hero penetrates is not made clear, but he can at least behold the meads of asphodel. As Rohde long ago pointed out,⁶ the eschatology of this part of the *Nekyia* is in substantial agreement with that of the *Iliad*. Notably the account given by Antikleia of the fate of body and *ψυχή* after death accords with that given by the ghost of Patroklos in

¹ Ibid. 125-32, 227-8.

² λ 104 ff.

³ The poet does not explicitly say that the shades come up through the pit, but he does not indicate any alternative route, nor is it easy to imagine one. That in the fifth century they were regarded as issuing by way of the *πάρος* is proved by the well-known vase-painting which represents Odysseus as seated with drawn sword on the edge of the pit, into which blood is still dripping from the throat of the slaughtered ram, while the head of Teiresias appears in the mouth of the hole. The poet may have used non-committal expressions to avoid drawing attention to the discrepancy between his two narratives. In κ 528-9 Odysseus is bidden to avert his eyes from the pit after the slaughter of the victims while the shades make their exit *en masse*, after which he is to keep them aloof until the appearance of Teiresias. Needless to say, it is impossible to impose consistency on our data. See *Mon. d. Inst.* iv, pl. 19; Engelmann, *Bilder-Atlas zu Homer, Od.* pl. ix, 49.

⁴ κ 491, λ 155, μ 21-2.

⁵ λ 474-6.

⁶ Rohde, *Psyche*, i, pp. 49 ff.

the *Iliad*. The episode of the heroines which ensues is manifestly an interpolation, though neatly articulated with the context at the end, so that it cannot be removed without leaving a trace. The real transition from the pit to the house of Hades is masked by the long interruption which arises from the suggestion of Odysseus to his audience that it is time to break off.¹ Then comes the supreme conclusion of the story of the men of the Trojan War in the meeting of Odysseus with Agamemnon, Achilles, and the Greater Aias. Throughout close heed is paid to all that has been told in the *Telemacheia*. From the shade of Agamemnon we hear the first denunciation of Clytaemnestra as prime mover in the plot and subsequently of her murder of Cassandra; our previous knowledge of the part played by Aigisthos makes it possible for the poet to deal briefly with it here and concentrate attention on the new and vital element. It fills Odysseus with horror and elicits from him the only condemnation of Helen at once unambiguous and at least relatively impersonal which extant Greek literature affords before Aeschylus.² He pairs her with Clytaemnestra in the *γυναικεῖαι βουαὶ* which have destroyed the house of Atreus; is it possible that from this momentary association the story that she was her sister arose?³

While Odysseus and the shade of the king of men are still conversing, those heroes approach for whose appearance Nestor has prepared us,⁴ Achilles with his two comrades Patroklos and Antilochos and the Greater Aias. We shall better appreciate the austere economy with which the entire *Nekyia* is handled if we obliterate from our memories not only the Catalogue of Heroines but also all that follows the withdrawal of the shade of Aias except the concluding lines of the book—i.e. ignore 565—

¹ In Alkinoös' puzzling implication (368-9) that Odysseus has already told the story of *παύρων Ἀργείων* there may possibly lurk a trace of an earlier version, but this courtly interlude must be as a whole the work of our poet.

² The Hesiodic view of Helen is sometimes said to show an advance on the epic in moral criticism, but in fact it merely repeats the epic view. 'Ελένης ἔρεκ' ἠνέκμοιο (*Op.* 165) is borrowed from the passage which we are now considering, whence, possibly, Achilles also quotes it in *I* 339 (if we regard that book as late), a passage of savage irony inspired by personal grievance. The formula is derived from the earlier tag which repeatedly describes Paris as 'Ελένης πόνη ἠνέκμοιο. The story in the 'H εἶαι (Hes. fr. 93) ascribes her misconduct to the curse laid by Aphrodite on the daughters of Tyndareos (who now include Clytaemnestra); this is merely a clumsy variation of the *ἔρεκ* of Homer. It implies indeed unequivocal condemnation of the action, but exonerates the heroine so far as moral responsibility is concerned. If the Scholiast on Lycoph. *Alexandra* 820, 822 (= Hes. fr. 266) is to be trusted, Hesiod (i.e. the Hesiodic school) devised the story of the *eidolon* which went to Troy, thereby completely exonerating Helen. The lyric poets appear to have founded a tradition of comparing her to her disadvantage with Thetis and Andromache; what Stesichorus said of her in his original ode we do not know.

³ It will be noted that in the episode of the heroines Leda is said to be the mother of Kastor and Polydeukes by Tyndareos and no explanation is given of their shared semi-immortality. This looks as though the later grouping of Helen and Polydeukes, Clytaemnestra and Castor, were already known to the Cataloguer and probably his invention (Hes. fr. 93); but this affiliation of Clytaemnestra could not be admitted to the *Odyssey*.

⁴ γ 109-12.

635 inclusive. Like the Catalogue of Heroines this addition is skilfully worked into the original text. After these eliminations we are left with, first, the traditional figure of Teiresias, doubtless originally located with his *νεκυομαντεῖον* in another region, i.e. if we accept Thesprotia as the scene indicated in the *Odyssey*. Next come Elpenor and Antikleia, figures which may be safely credited to the poet of the *Odyssey*; chronologically the former of course makes his appearance before Teiresias. Apart from the pathos of the meeting between mother and son, Antikleia's function is to inform Odysseus of the state of affairs in Ithaca and give him at least partial reassurance about the lot of father, wife, and son. Then comes the shade of Agamemnon, whose tale has already been discussed, and then Achilles, who has nothing to tell; of earthly happenings Odysseus knows more than he does. He has questions to ask about his father and son, and Odysseus tells of the prowess of Neoptolemos, whose existence and residence in Skyros were known to the poet of the *Iliad*.¹ Here we are once more confronted with the Trojan horse, evidently a theme of great interest at the moment and, like the introduction of the son of Dawn, slayer of Antilochos and victim of Achilles, one of the first deliberately fictional additions to the Tale of Troy. It is based on some perverted notion of a siege-engine, a thing unknown in the Bronze Age, as detailed Egyptian representations of besieged towns show, and first vouched for by Assyrian reliefs of the ninth century. Siege-engines were undoubtedly an invention of Assyria, and it is presumably from that quarter that a rumour of them found its way to Ionia, either directly or via Cyprus. Like the poet of the *Iliad*, the poet of the *Odyssey* has some knowledge of Cyprus; he knows that Aphrodite has a sanctuary at Paphos,² and the burlesque loves of the goddess and Ares strike the same note as their burlesque performances on the field of battle in *E*. It was probably their conjunction in the *Iliad* that suggested to our poet their further adventure in the *Odyssey*.

Throughout, our poet shows himself aware of the *Iliad*. We have seen that his conception of Helen is closely, though by no means uncritically, related to that dominant in the *Iliad*; his view of Achilles is in complete harmony with that of the epic of the Trojan War. The opening lines of the hero's speech in the *Nekyia*³ in which he exalts life in any circumstances over death recall a similar passage in the Embassy;⁴ but since it is impossible to determine the relation of the Embassy to the rest of the *Iliad*, it is also impossible to say in this case which poet was influenced by the other; many scholars have thought them identical.

The appearance of the shade of Aias fitly concludes the Tale of Troy; the appeal of Odysseus and the implacable silence of the other, poignant as the utterance of Achilles, emphasize anew the futility and tragic waste

¹ *T* 326-7.

² *λ* 488-91.

³ *θ* 362-3.

⁴ *ι* 401 ff.

of the war, a view which the poet indicates repeatedly. There is not a character in the *Odyssey* who even hints at a balance of gain, or at any gain at all.

By his skilfully constructed narrative our poet has achieved a double aim; he has satisfied his hearers' curiosity about the latter end of the Greek heroes of the war, and from the first he has set his *dramatis personae* on a stage of epic dignity. No doubt can be felt about the status of a hero whose fate is a matter of debate on Olympus, and though Telemachus and Penelope are not, at any rate at this stage, of heroic stature, they serve to fix our expectations, like their own, on the hero's return, while the eulogies of Nestor and Menelaos¹ enhance our sense of his unique quality. The skill of this preparation will be best appreciated if we consider the probable course of the story of the Hero's Return before the composition of the *Odyssey*.

That the adventures of the Apologoi and, very probably, others of the same sort were already attached to the name of Odysseus is certain; that they had been told in the third person may be taken for granted. They would form part of his *Nostos*, and as such a poem, if it existed, could be complete only when the hero was established in his home, it presumably included the Bow-fight. The vestiges of an earlier version which we have noted point to this, for the Teiresias version of the *Nekyia* describes the state of affairs which will confront Odysseus on his arrival in Ithaca and foretells his victory. Possibly the poem went further, for the shade of the seer then prescribes the pilgrimage which after disposing of the Suitors Odysseus must make to appease the wrath of Poseidon. This is apparently part of the original story, for it is bound up with the episode of Polyphemus, the most primitive of the adventures and widely diffused in *märchen* form in both Europe and Asia. Our poet had no use for the further ordeal; to have included it would have destroyed that unity of plot which Aristotle praises as the distinctive excellence of the *Odyssey*, yet barely fifty lines before he brings his epic to a close (at ψ 296) he brings up the injunction again. It looks as if the incident were included in the accepted saga of Odysseus and could not be wholly ignored.

There is no need to dwell on the stroke of genius by which our poet, putting the history of the ten years' wanderings into the mouth of the hero himself, confined the action of the poem within the limits of a few weeks and reduced the adventures to the status of episodes subsidiary to the main theme, viz. the landing on Ithaca, the vengeance and the recognition.² How far the poet altered his material as well as selected from it we have no means of judging. We may hazard the guess that the cruder adventures, especially that of Polyphemus, retain something very close

¹ γ 120-1, δ 104-6.

² In his précis of the *Odyssey* Aristotle disposes of the Apologoi in a single word—*χρηνοβέτης* (*Poet.* 1455^b).

to their original shape; but we have found the Nekyia to have been profoundly altered, and we may feel fairly certain that our poet touched little which he did not adorn if not transform, and that he discarded much. Of Calypso surely little but the name can be traditional. Her scene of high romantic comedy with Hermes could hardly be the work of anyone less sophisticated than our poet, and it will be noted that not only are her relations with Odysseus on a purely human level, but that, whereas in the Apologoi the miraculous element is stressed, on Calypso's island the doings of both are attuned as nearly as may be to a note of reality. Calypso does not produce a magical ship and Odysseus could not build an ordinary one single-handed; a raft he might in favourable circumstances achieve, and does so, apparently following the Egyptian Nile-boat as a model.¹ His adventures on the raft are well within what we have lately learned to be the range of human endurance; even his ordeal on the spar does not greatly surpass even in duration things which we know men to have undergone and lived to recount. Whatever we are told of him in the third person is kept carefully credible or very nearly so; it needs the voice of Odysseus himself to carry conviction regarding the adventures of the Apologoi.² Everywhere we are being prepared for his return to the actual world; even the idyllic laundering picnic of Nausicaa plays its part in conducing to this end, and the evening in the palace of Alkinoos is spent more or less as it might have been in a noble and wealthy Ionian house of the day. Odysseus tells indeed of his stay on Calypso's isle, but of that we already know. When the whole miraculous tale is to be unfolded, he at last reveals his identity as a well-known hero and begins with a realistic account of a raid on the Thracian coast. Only when the north wind drives him south from Cythera does his course fade away into the unexplored and at last into the impossible; but his colloquy with so many historical characters, in the House of Hades though it be, re-establishes him as a denizen of the world to which he is seeking to return.

The two worlds, however, cannot be joined. It is not the Phaeacians with individual names, with whom he has held familiar converse and who have listened spell-bound to his tale—it is not these who can bring Odysseus home; the farewells are said in Scherie, and it is a mute, nameless, and inscrutable ship's company that conveys him sleeping through the night.

¹ See E. Warre, *JHS.* v (1884), pp. 209 ff., for the method of construction, and A. Köster, *Das antike Seemanns*, for the Nile boat (p. 14, fig. 1). It is hard to see whence but from Egypt the Greeks could have got the notion of an elaborately constructed raft. Cf. Herodotus ii. 96; Odysseus, however, having pine-trees at his disposal, was not limited to the 3-foot acacia planks of the Egyptians.

² For one part of his tale Odysseus has to fall back on higher authority. The complaint of Helios to Zeus (a 8-9) which brought about the storm that cast him on Calypso's island could be known only to the gods, yet it was an essential link in the story, and Hermes and Calypso between them supply it. All that the poet asks of us is to realize that more passed between them than could be revealed in ε; he calls attention to the theme by making Calypso dwell on the plight in which Odysseus reached her (ε 130-4). Hermes told Calypso of the scene on Olympus which accounted for it, and Calypso revealed it to Odysseus before his departure.

Of the second half of the poem there is little to be said. Whether the subsidiary figures who are successively drawn into the action are traditional cannot be determined with certainty. Their rôles probably are, at any rate in most cases; there must have been a Faithful Servant outside the palace, Penelope must have had a trustworthy maid within, and contrasting types no doubt figured on the side of the Suitors. Their actual doings, however, seem to be mainly or wholly the work of our poet. The history of Eumaios comes from the kind of source which he repeatedly utilizes in the false tales of Odysseus and for the same reason; more spaciousness and variety must be devised for a narrative which must attain a length proportionate to that of the merely introductory *Telemacheia* and *Wanderings*, and in which no further use can be made of the Trojan background. Melanthios plays his chief part in connexion with the Spear-fight, an episode which cannot have formed part of an original poem in which the Bow-fight was the climax, and if in this poem the Recognition preceded the fight, Eurykleia, if she existed at all, must have played a much less prominent part than she does in the *Odyssey*. The introduction of Theoklymenos must be purely fictional, the chief object being to enhance by his exercise of second sight the atmosphere of doom and horror as the crisis approaches; but the space given to the story of his ancestor Melampus and the other descendants of the latter may be designed to link Ithaca, as the Trojan War did in the first half of the poem, with the greater world of Greece.

The incident of the Suitors' gifts to Penelope¹ has often been challenged as an interpolation and does not seem perfectly in place in the *Odyssey* as it stands. Teiresias, however, has spoken of the wooers as *ἔδνα δίδότες*, and in a poem in which the Recognition preceded the Bow-fight a profitable manœuvre might have been contrived by husband and wife acting together, or, as the words of Teiresias rather suggest, the presentation may have been there simply as part of the normal procedure. The narrative does not suffer by the excision of the episode, but the positive grounds for taking this course are not conclusive; possibly our poet found it in the tradition and too popular to be discarded.

The Spear-fight can have formed no part of the original story of the Return, which must have been achieved by the bow alone. This weapon could not, however, by itself provide a *dénouement* of adequate length for a tale which had grown to epic proportions; to dispose by it of over 100 victims would involve intolerable monotony. The Spear-fight, beginning with the fetching of the arms and the capture of Melanthios, affords a variety of incidents narrated with *verve*, and its addition to the earlier story is skilfully contrived; it contains, so far as appears, no inconsistencies or anachronisms. It can be credited only to the poet of the *Odyssey*.

¹ α 158-303.

In the entire epic no such flaw has come to light as has in the case of the *Iliad* led readily to the suspicion of multiple authorship. If the solution of the double assembly on Olympus be accepted and the termination of the poem from ψ 297 to the end of ω rejected (as both Aristophanes of Byzantium and Aristarchus thought it should be), no grounds remain for questioning the unity of the authorship; the *Nekyia* obviously lent itself to expansion and the additions neither affect the narrative nor mar the plot. To this conclusion archaeological evidence has contributed little if anything, beyond fixing the composition to a period which falls within the fifty years between c. 730 and c. 680 and probably nearer to the lower limit. It has, however, established the birthplace of the saga on the east coast of the Aegean; and when excavation enables us to fix the date of the beginning of Hellenic colonization in Ionia, we shall have a *terminus post quem* for the first appearance of Odysseus as the hero of the bow.

In both *Iliad* and *Odyssey*, passages which on archaeological or historical or quasi-historical evidence are generally regarded as late and therefore by Unitarians as interpolations can, with two exceptions presently to be mentioned, be dated with a high degree of probability, sometimes with virtual certainty, to the seventh century. This implies that the two poems were complete by 700 or not much later, and that for some time after, but not for very long, the text was transmitted in circumstances which made it highly vulnerable to interpolation. The only interpolations definitely datable to the sixth century (apart, of course, from small verbal alterations, the needless repetition of stock lines and so forth, which may occur at any time) are the two to which reference has been made, the Athenian entry in the *Catalogue of Ships*, which may be taken to involve that of Salamis, and the *Supplication* of the sixth book in the Panathenaic form which it now wears.¹ If we consider the facilities which the Athenians possessed for imposing their text on the Greek world (as the Attic colouring of the dialect shows), the fact that interpolations which can plausibly be ascribed to them are so few is striking. It suggests that they had received in writing the text which they transmitted. By the middle of the seventh century writing had been practised in the Greek world for not less than a hundred years and had been in ordinary and trivial use for at least fifty; there is no obvious reason why the two great poems, preserved orally for about half a century, should not then have been accorded the safeguard of script.²

¹ To these the intrusion of Erichthonios into the genealogy of Aineias (*Y* 219, 230) may be added with tolerable certainty. Cf. *AJA* lii (1948), pp. 22-3.

² Against this suggestion must be set Professor Mazon's contention (*Introduction à l'Iliade*, Paris, 1942, p. 71) that the poems could not have been written down before the foundation of Naukratis had enabled the Greeks to import papyrus freely; the date which he proposes falls within the Peisistratid period, i.e. after 550. The question of the direct importation of papyrus was first raised by L. Mallet, *Les Premiers Établissements des Grecs en Égypte*. That it was facilitated is of course beyond question; the importation of cheap Egyptian articles such as scarabs first becomes abundant, as has been noted above, in the sixth century. Naukratis, however, was founded before the end of the seventh century, certainly not later than 650 (H. Payne, *Necro-*

corinthia, p. 25; R. M. Cook, *JHS.* lvii (1937), pp. 227 ff.); M. Mazon's date can therefore be raised by fifty years. More than this, it may be urged that from first to last the word denoting a papyrus roll is *βιβλίον*, which shows that the article was originally associated in the Greek mind with the town of Byblos. It is difficult to see how this could have come about unless the Greeks had been in the habit of importing papyrus from the Phoenicians for some considerable time before the foundation of Naukratis gave them direct access to Egypt—a period which presumably began with the diffusion of the Phoenician alphabet over Greek lands in the eighth century. This does not however go to the root of the matter. The assumption that papyrus was the only material on which a written literature could be produced is unwarranted and is shown to be erroneous by the well-known passage in Herodotus: καὶ τὰς βίβλους διψόερας πολλοὺς ἐκ τοῦ παλαιῦ ἐκ τῶν Ἰωνέων ἔτι κατὰ ἐν σπέραι βίβλων ἐχρῶντο διψόερας αἰγίται τε καὶ οἰετοί. This can only mean that the Ionians called rolls of papyrus *διψόερας* in the historian's own day and had done so from a remote past because in the days when papyrus was hard to come by they had used *διψόερας* in its place. The period referred to can hardly be other than that between their adoption of the Phoenician alphabet and the foundation of Naukratis. It is true that *σπέραις* is sometimes taken to mean 'temporary shortage' but the other rendering is equally legitimate and gives a better sense. Only if *διψόερας* had been the original writing material of the Ionians could the name have triumphed over that of the otherwise universal *βιβλος* and even so the use of the material must have lasted for a considerable time. Herodotus goes on to state that *διψόερας* were still used by many barbarians; he does not mention Cyprus on the margin of the Greek world, where the practice seems to have survived. It is true that we learn little from the Idalion bronze; that the characters engraved on it are described in the inscription which they record as *ἰθαλασμομένα* (Hoffman I, 135 B, 28, p. 70) merely testifies that originally the Cypriots had used a soft reed pen or a fine brush, the alternatives for a scribe who writes on parchment. That the practice continued however after the classical age, at any rate among the humbler classes, is shown by two glosses in Hesychius: *διψόεραλοιφός, γραμματοδιδασκαλὸς παρὰ τοῖς Κύπριοις* and *Διψοτήριον, γραφεῖον Κύπριος*. Neither of these forms is Cypriot; the age of the *κοινή* has come.

That *διψόερας* were in use at some period in Greece proper appears from two tragic fragments of which one (Nauck², adesp. 446) passed into a proverb: (ὁ) Ζεὺς κατ'ὲς χρόνους εἰς τὰς διψόερας. The other is from the *Pleisthenes* of Euripides (*ibid.* Eur. 627):

Εἶναι γὰρ, εἰοὶ διψόερας μελεγραφεῖς
παλῶν γέμουσα Λοφίου γηρημάτων.

Were oracles recorded on parchment preserved at Delphi in Euripides' day? were they possibly (religious institutions being notoriously conservative) still so recorded when he wrote? or did he merely use a word of archaic associations to create an atmosphere of majestic antiquity? At all events, he and his audience must have associated *διψόερας* with records of peculiar solemnity, a conclusion corroborated by the anonymous fragment.

That the word *γράφειν* prevailed throughout the Greek world irrespective of the material written on is doubtless due to several causes. We may conjecture that one was the importance of stone-cut inscriptions in preserving and making accessible documents important to the community, such as legal enactments (Dieros, 7th cent.), and dedications in temples (e.g. at Perachora, 7th cent.), and may also note the small private votive of bronze (Mantiklos figurine, Boeotian). Nor should the practice of scratching graffiti on clay vases be overlooked; it has given us our earliest extant Greek inscription and the Hymettus sherdls show that it soon became common. Possibly the most important factor was the wide-spread use of the *δάκτυλος*, the sole original contribution of the Greeks to the paraphernalia of writing. Though not mentioned by that name in Homer, it is unmistakably described in the *πινὰς σπινάρης* of Ptolemy, who did indeed 'scratch' his lethal message on it. A glance at L. and S.² will show how wide a range of meanings the word acquired; on the Idalion bronze (*loc. cit.*) it appears in the form *δάκτυλος* and with the meaning of 'document'. Hardly less accommodating, *γράφειν* had acquired the meaning of 'paint' (presumably as an extension of 'draw') in the fifth century and very possibly a good deal earlier. On the date of the reduction to writing of the *Iliad* and *Odyssey* that of the use of *διψόερας* throws no light. There was no question of multiplying texts for a reading public; the sole object would be to establish some control of their recitation on public occasions. It is admitted that this was done at Athens in the sixth century, and it is by no means impossible that it had been done by one or more of the Ionian cities at an earlier date.

If, however, a date c. 650 is considered to be too early for such an undertaking and yet the apparent cessation of interpolation on a considerable scale falls at about that date, this must have been due to the establishment of some other form of control, and this also can only have been exercised in connexion with public occasions. Unfortunately we know nothing of these, either in the days when epic poetry was still being composed or subsequently. If, however, there is anything in the arguments by which it has been sought to show that both *Iliad* and *Odyssey* were works of what may for practical purposes be described as single authorship produced in the course of two generations or a period very little longer and completed at latest early in the seventh century, then it is reasonable to assume that the first cause of the assault on the integrity of the tradition was the death of first one and then the other of the two great poets. As they had not written for a reading public, they had presumably lived in places or a place where epics or at least heroic poems were composed and recited in a manner more formal and public than any which they themselves record. The continuity of epic tradition suggests that such a centre or centres may go back some way and may have witnessed the production of the *Mēis* of Achilles and the Bow-fight of Odysseus. Here, presumably, many *aoidoi* received their training and composed¹ as well as recited heroic lays. When epic ceased to be a living art, they gave place to the *paideutai*, who are generally and doubtless justly credited with the corruption of the text. Had the process continued unchecked for a hundred years and more, it is hardly possible that the poems should have preserved in so high a degree as they have their structural integrity.

¹ Eumaios' description of the *aoidoi* *αἱ τοὶ θεῶν ἔδδαν δέδαναι ἔτα' ἑκατόερα* (p. 518-19) leaves no doubt that he was an original poet as well as a reciter, a point which his constant epithet *θεῖος* is almost enough to establish. In any case, a professional bard can always be relied on not merely to compose, but to improvise.



Painted limestone tablet from a house at Mycenae (L.H. III).



2. The warrior stela from Mycenae (LH III).



1. Minoan-Mycenaean engraved gem of the Late Bronze Age.



3. Sherd from Mycenae (LH III).



4. Ivory mirror-handle from Enkomi, Cyprus.



1a.



1b.

The Warrior vase (LH III). From Mycenae.



2.



3.

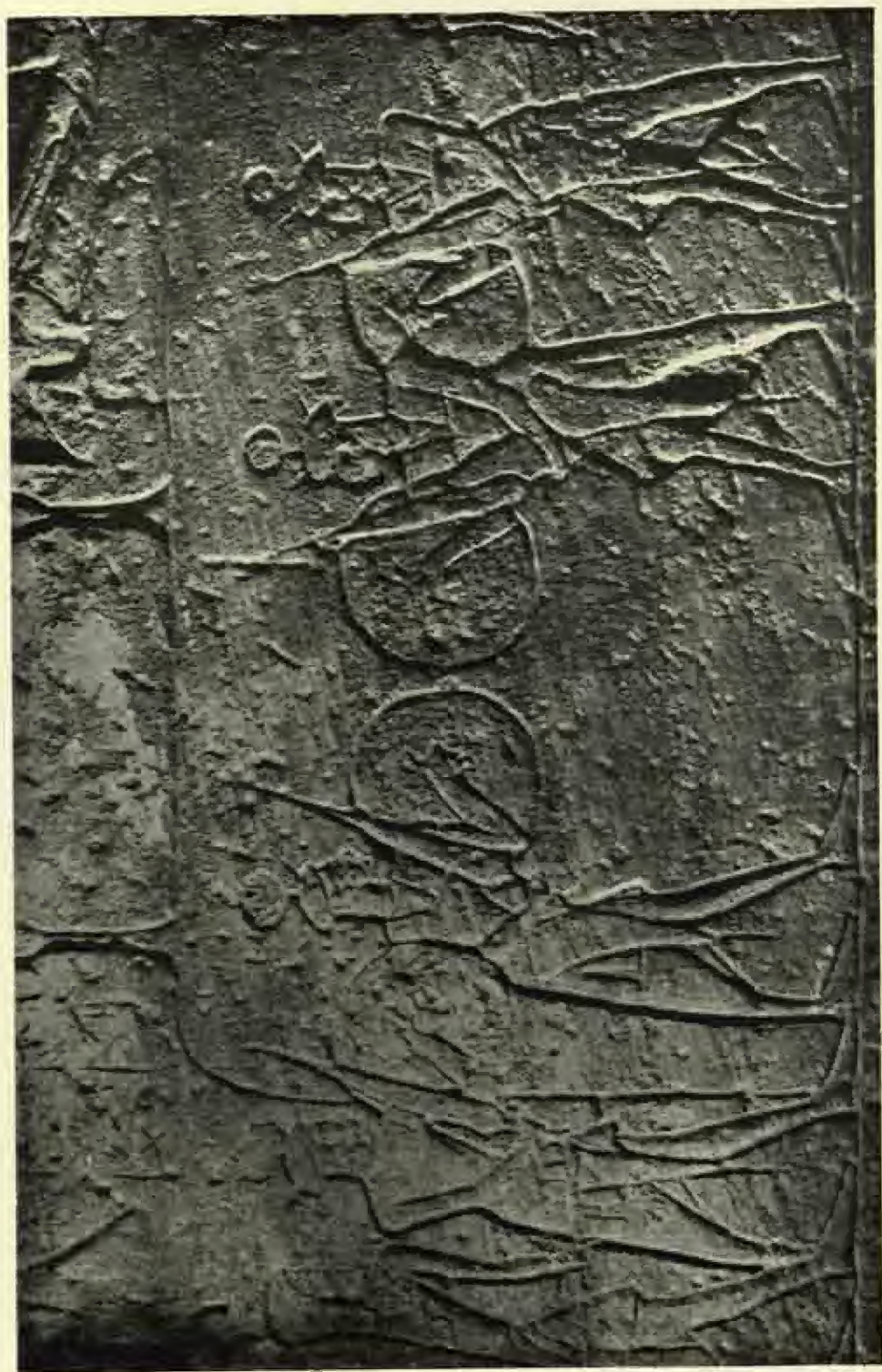
2 and 3. Bronze shield-bosses from the Kerameikos.



1. Shardana bodyguard of Ramses II.



2. Palesati in action against ship of Ramses III.



Shardana bodyguard of Ramses II.



1. Figure from the relief on Pl. V as reproduced in 1833.



5. Gem from Siphnos.



3. Shield model from the Agora, Athens.



2. Boeotian jug.



4a.



4b.

Reliefs from the bronze gates of Shalmaneser III.



1.



2.



3.



4.

1. Bronze shield-boss from Skyros, 2-4. Clay model of 'Dipylon' shield.



1. Reconstruction of a shield from the Idæan cave.



2.



3.

Terra-cotta figurines from Cyprus.



1.



2.

Terra-cotta shield (A) from Tiryns.



I.



II.

Fragment of Terra-cotta shield (II) from Tiryns.



1. Ivory box from Enkomi, Cyprus.



2.



3.

Bronze reliefs from Knossos.



4. Bronze figurine from Olympia.



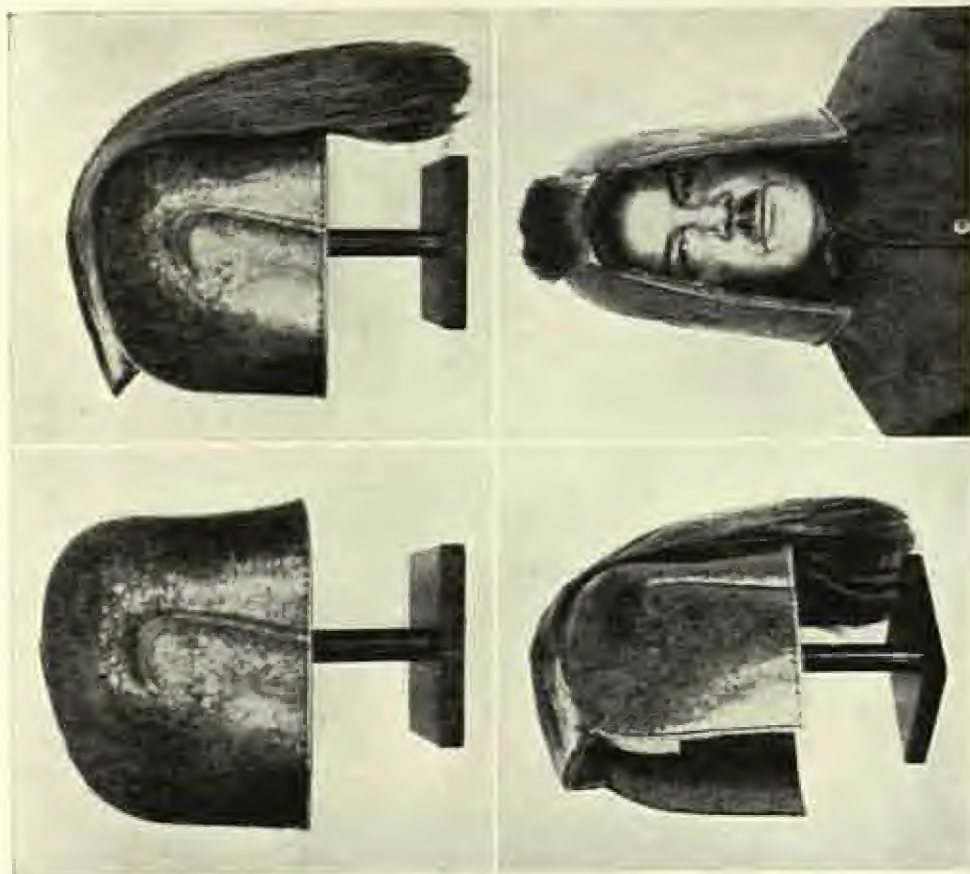
3. Fresco from Mycenae (L.H. III).



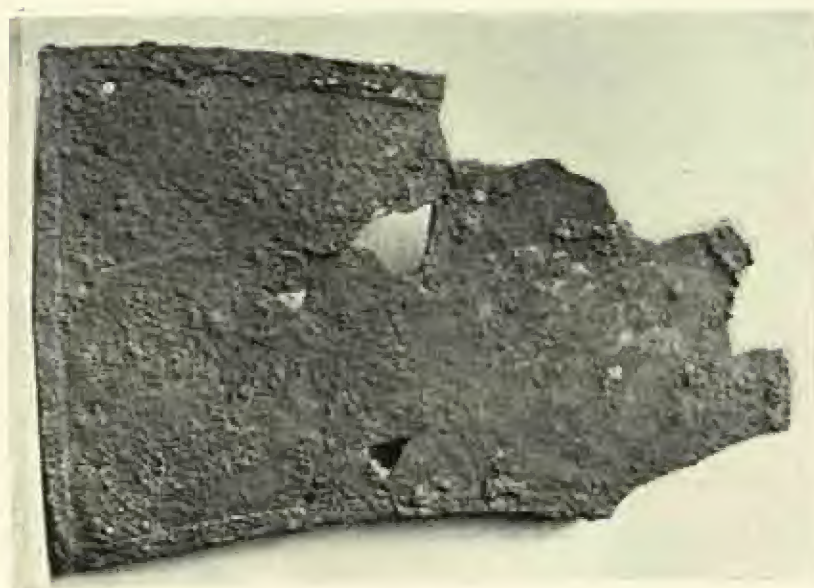
1. Sherd from Mycenae (L.H. III).



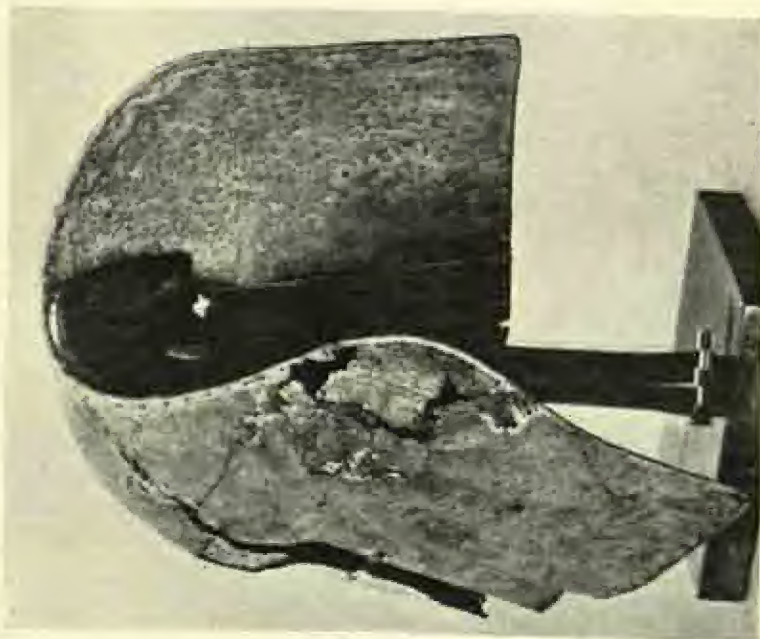
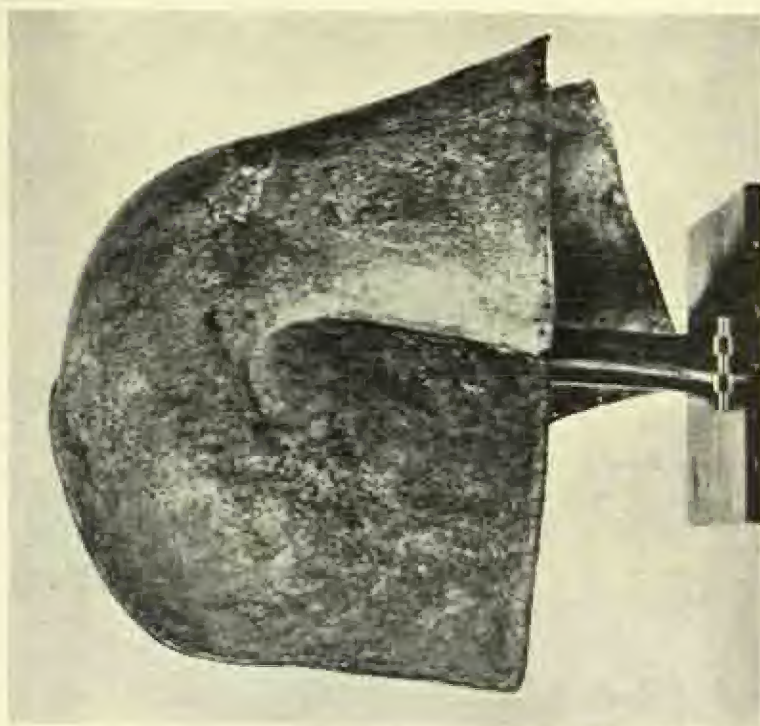
2. Sherd from Mycenae (L.H. III).



2. Reconstruction of helmet from Dendra.



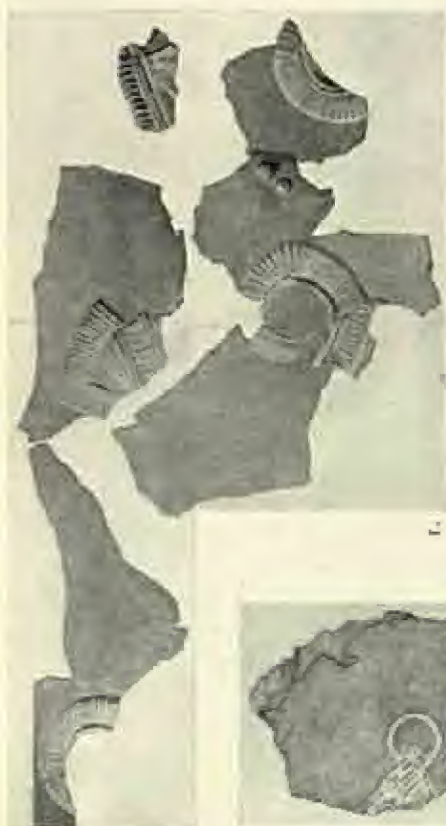
1. Cheek-piece of helmet from Ialysos (LH IIB).



Bronze helmet from Demira (L.H. 1-II).



5. Steatite rhyton from Hagia Triadha, Crete.



1.



2.



3.



4.

1-4. Representations of helmets from Mycenae.



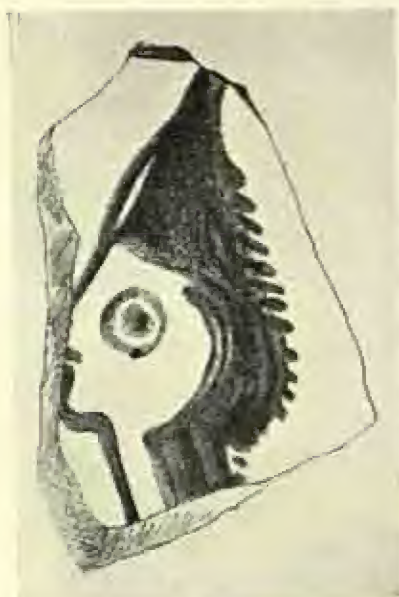
1. Relief from Boghazkeui.



2. Relief from Carchemish.



3. Sherd from Mycenae.



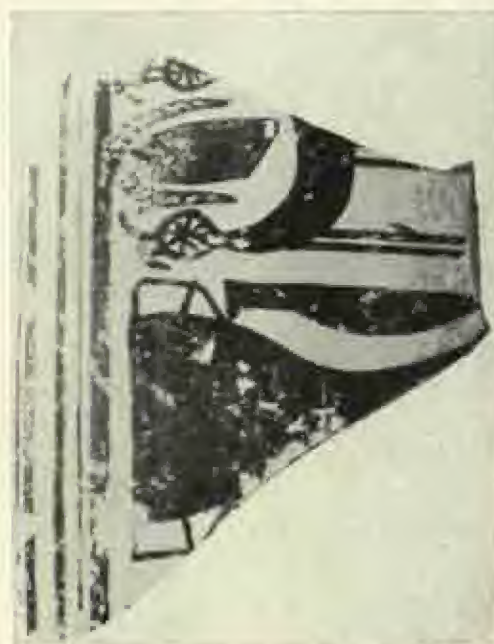
4. Sherd from Mycenae.



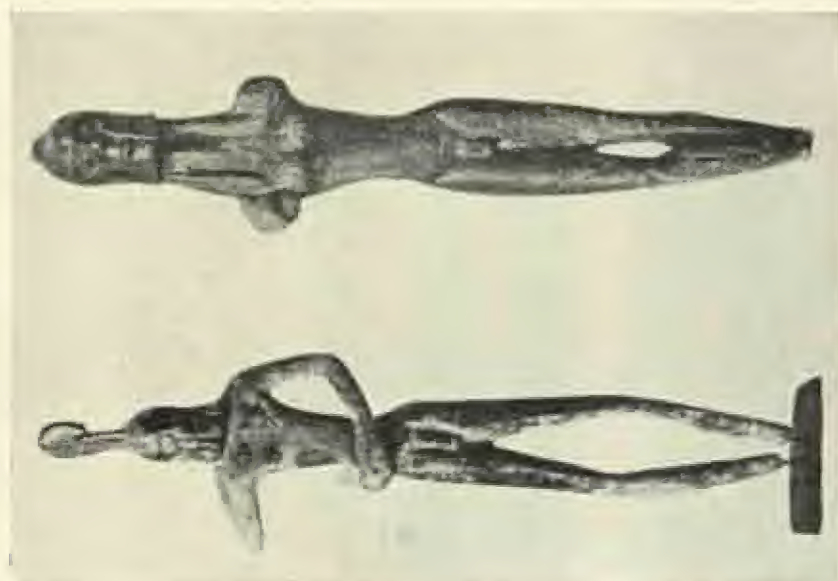
5. Egyptian representations of a Semitic and an Egyptian helmet.



1. The vase of Aristonochos



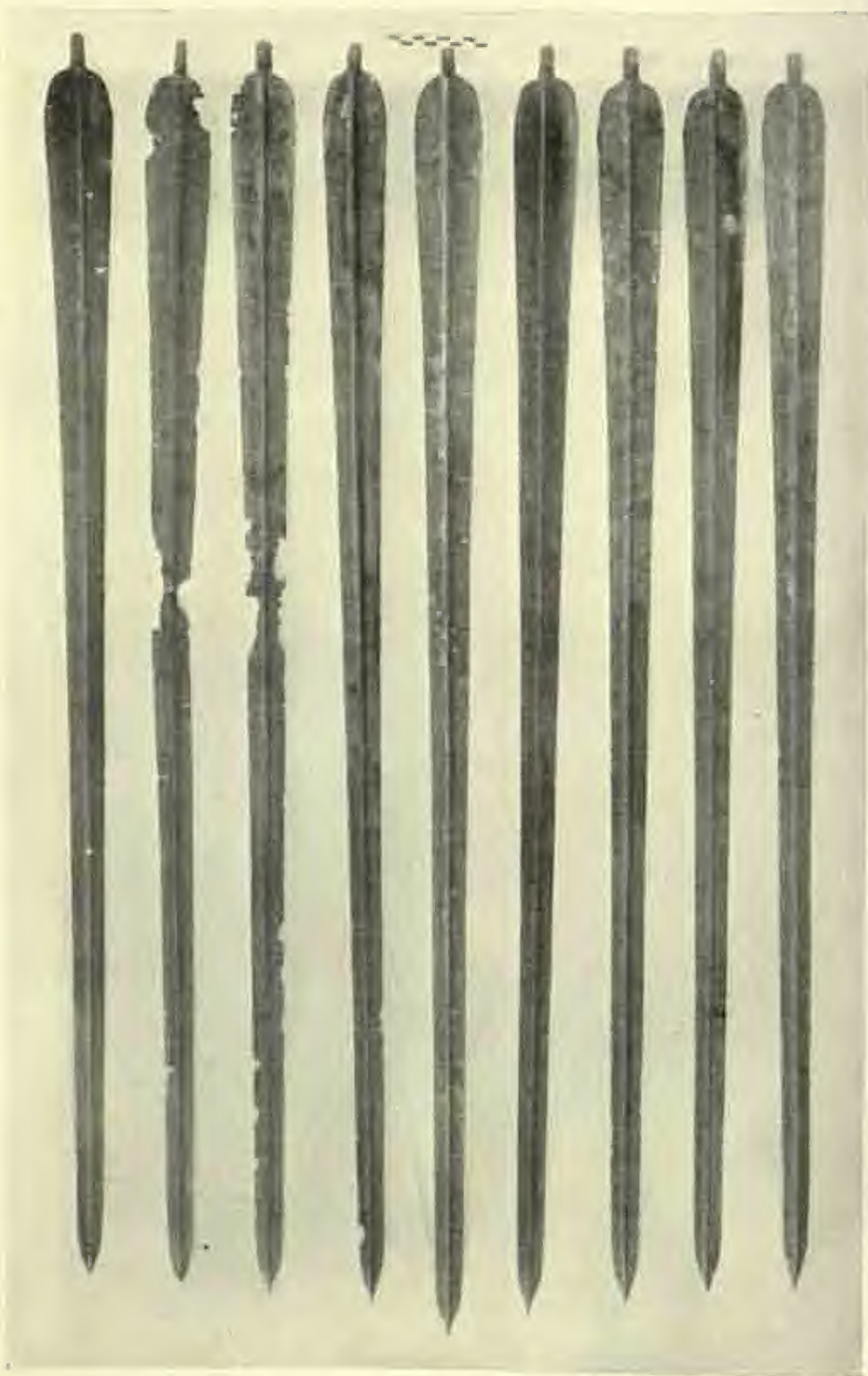
2. Sherd from the Argive Herakles



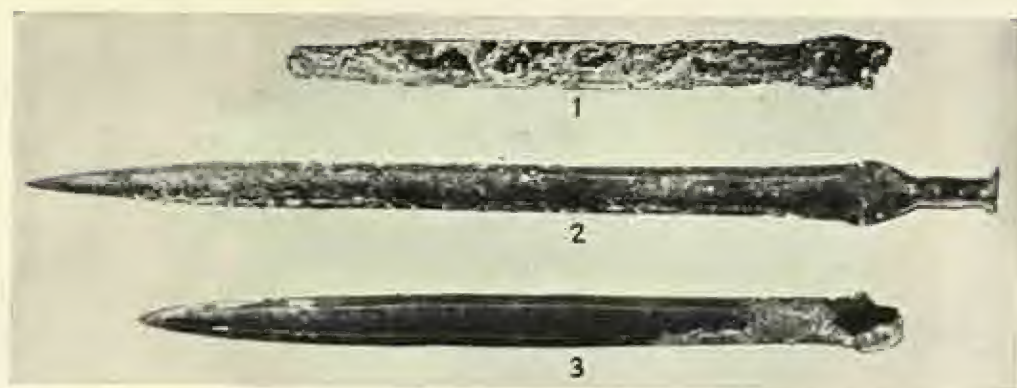
a

b

3. Bronze figurines from Olympia (a) and Delphi (b).



Bronze swords from Arkalochori, Crete.



1. Bronze slashing swords from Egypt, Late Bronze Age.



2. Bronze slashing swords, Late Bronze Age, Mouliana.



3. Bronze slashing sword, proto-Geometric, Mouliana.



4. Iron slashing sword, proto-Geometric, from the Kerameikos, Grave 6.



1a.



1b.

Attic Geometric vase (reverse).



2. Herakles with Scythian bow and Greek quiver; Attic red-figure vase.



1. Huntsman and youth with game; Cretan bronze.



2. Paris with Scythian bow; Chalcidian vase.



1. Amazon with Scythian bow; Attic red-figured vase.



2. Artemis with composite bow; Attic black-figured sherd.



3. Terra-cotta group from Cyprus.



4. Scyth stringing bow; figure on an electrum vase from Kul Oba, near Kerch.



1. Apollo with composite bow; Attic red-figured vase.



2. Herakles with Scythian bow and bow case; Attic red-figured vase.



Stelae from Shaft-grave V, Mycenae (L.H. I).



2. Cypriot vase of c. 600.



1. Chariot found in Egypt. 15th cent.



3. Attic Geometric vase.



4. Bronze model found in the Tiber.



3.
Attic Geometric vases.



1. Fragment of fresco from Mycenae (LH III).



2. Fragment of fresco from Mycenae (LH III).



3. Sherd from Ugarit.



1. Reconstructed fresco from Thebes (L.H. III).



2. Reconstructed fresco from Tiryns (L.H. III).



3. Ivory figurine from Ephesus.



3. Grave stela from Sinjerli.



2. Shard of black-figured Attic vase.



1. Bronze figurine from Ephesus.



a



b



a



b



c

1. Terra-cotta figurine from Perachora.

2. Ivory figurine from Ephesus.



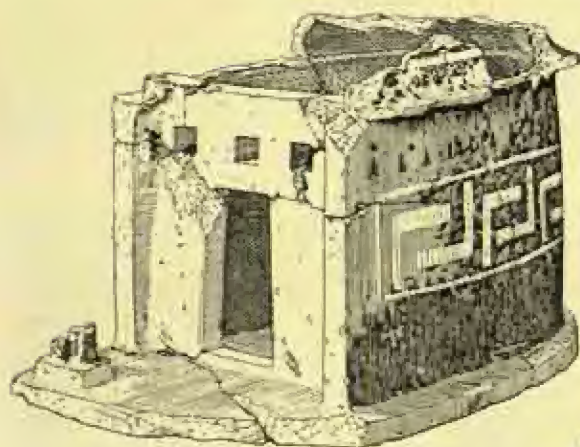
1. Neck panel of a Melian amphora.



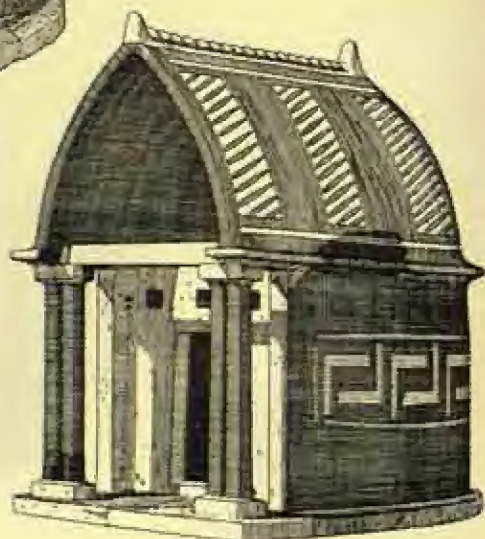
2. Apollo and Artemis on a Melian amphora.



1. House- or temple-model from the Argive Heraion.



2. House- or temple-model from Perachora.



3. Reconstruction of 2.

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